

EXHIBIT A

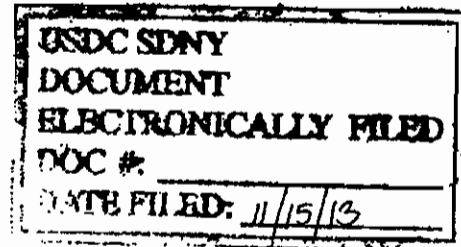
UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

In Re: Methyl Tertiary Butyl Ether
("MTBE") Products Liability Litigation

Master File No. 1:00 – 1898
MDL 1358 (SAS): M21-88

This Document Relates To:

*Commonwealth of Puerto Rico, et al. v. Shell
Oil Co., et al.*, No. 07 CV 10470



SHIRA A. SCHEINDLIN, U.S.D.J.:

[PROPOSED] CASE MANAGEMENT ORDER NO. 112

(EXPERT DISCOVERY PROTOCOL)

With respect to testifying experts in this litigation:

I. The parties shall produce the required expert reliance materials (hereinafter, the "Reliance Materials") no later than five business days after the deadline to serve each relevant expert report pursuant to Case Management Order entered September 30, 2013. The Reliance Materials to be produced shall include all files, documents, texts and underlying data or manipulations of such data reviewed or relied upon by that expert in forming the basis for his or her opinion, including all computer software programs, models, computer simulations on which the expert's opinions are based, and work papers. Any additional reliance materials generated or first reviewed and relied upon by the expert subsequent to the initial production of reliance materials but prior to the deposition shall be produced promptly and no later than 48 hours before the commencement of the deposition. Reliance materials that are publicly available and have been cited in full by the expert need not be produced absent a specific request.

II. With respect to experts who rely on computer-based modeling, the following illustrate the nature or content of the modeling-related Reliance Materials to be produced:

- A. All electronic executable copies and operating instructions for modeling programs and pre- and post-processor programs that are not public domain models and cannot reasonably be purchased by the requesting party. In all cases, the requesting party shall be responsible for obtaining any necessary licenses.

- B. All reference documents or calculations supporting selection of input parameter values or ranges.
- C. A tabular summary of input data specifying the range of values considered and the ultimate value(s) selected for purposes of calibration, sensitivity analysis, parameter optimization, validation and scenario/hypothesis testing.
- D. A modeling journal (log of model runs) regarding construction, calibration, sensitivity analysis, parameter optimization, validation and scenario/hypothesis testing.
- E. Electronic copies of all modeling files.
- F. Quantification of accuracy (alternatively, uncertainty analysis) regarding model output (groundwater flow and contaminant transport models).
- G. All electronic database files generated in support of the modeling analysis.
- H. All analytical model analyses conducted apart from the numerical model analysis for purposes of parameter selection, parameter optimization, model calibration, hypothesis testing, etc.

III. The deadlines set forth in Section I, above, will not govern the production of demonstrative exhibits to be used at trial as a summary of or support for the opinions to be expressed by an expert. Such demonstrative exhibits shall be produced three business days prior to the day when that expert will testify at trial, or such other time as the Court may order.

IV. For any witness who may offer any expert opinion testimony but is not required to provide a written report as per FRCP 26(a)(2)(C), the party sponsoring such witness shall disclose (i) the subject matter on which the witness is expected to present evidence under Federal Rule of Evidence 702, 703, or 705; and (ii) a summary of the facts and opinions to which the witness is expected to testify. Such disclosures shall be made according to the following schedule:

Plaintiffs' Non-Site-Specific 26(a)(2)(C) Witnesses – by January 6, 2014

Defendants' Non-Site-Specific 26(a)(2)(C) Witnesses – by February 21, 2014

Plaintiffs' Site-Specific 26(a)(2)(C) Witnesses – by February 21, 2014

Defendants' Site-Specific 26(a)(2)(C) Witnesses – by April 3, 2014

The parties shall produce Reliance Materials reviewed by witnesses whose expert opinion disclosures are made pursuant to this paragraph no later than five business days after the subject matter and summary of such witnesses' testimony is disclosed, as set forth in this paragraph. This Section in no way limits or expands the scope of available discovery of such witnesses in their capacity as percipient witnesses.

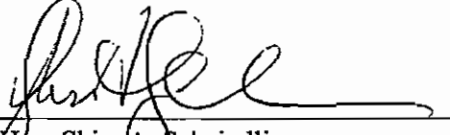
V. Nothing in this Protocol may be used by any party to establish the relevance or lack of relevance of any materials or information referenced herein.

VI. The parties shall meet and confer by February 1, 2014 for the purpose of addressing and formulating a plan for the scheduling, duration, location and other details regarding the proposed depositions of the parties' designated experts. The parties shall use best efforts to finalize a schedule for the depositions of the parties' non-site-specific experts by not later than March 10, 2014 and site-specific experts by not later than April 21, 2014. To the extent a non-site-specific expert also will provide site-specific testimony or opinion, such experts may be scheduled in accordance with the site-specific schedule contained in this paragraph. To the extent not already scheduled, the parties will use best efforts to finalize the schedule for deposition of Rule 26(a)(2)(C) witnesses by not later than May 2, 2014.

VII. Requests for Production contained in expert deposition notices shall be limited to:

- A. Materials required to be produced by Rule 26(a)(2)(B), to the extent not already produced;
- B. Reliance Materials, as defined herein and to the extent not already produced;
- C. Documents concerning retention and compensation in the above-captioned action;
- D. Articles, studies or reports authored by the expert that relate to the subject matter of the expert's opinion(s) in the above-captioned action, MTBE, TBA and/or ethanol, to the extent published within the last ten years;
- E. Expert reports and transcripts of deposition and/or trial testimony provided by the expert in any civil lawsuit or administrative matter that relate to the subject matter of the expert's opinion(s) in the above-captioned action, MTBE, TBA and/or ethanol, to the extent provided within the last four years;
- F. Hearing transcripts, orders, decisions or other rulings limiting or barring all or part of the expert's prior testimony or opinions that relate to the subject matter of the expert's opinion(s) in the above-captioned action, MTBE, TBA and/or ethanol, to the extent provided within the last four years; and
- G. To the extent permitted by Rule 26(b)(4)(C), communications between the expert and counsel for any party in the above-captioned action that: (i) relate to compensation in the above-captioned action; (ii) identify facts or data that counsel provided and that the expert considered in forming his/her opinions; and (iii) identify assumptions that counsel provided and that the expert relied on in informing his/her opinions.

SO ORDERED.



Hon. Shira A. Scheindlin
U.S.D.J.

Dated: New York, New York

November 15, 2013

EXHIBIT B

E51PMTBC1

1 UNITED STATES DISTRICT COURT
2 SOUTHERN DISTRICT OF NEW YORK

3 In Re: METHYL TERTIARY BUTYL
4 ETHER ("MTBE") PRODUCTS
5 LIABILITY LITIGATION

00 MDL 1358 (SAS)
00 CV 1898 (SAS)
07 CV 10470 (SAS)

6 New York, N.Y.
7 May 1, 2014
8 5:00 p.m.

9 Before:

10 HON. SHIRA A. SCHEINDLIN

11 District Judge

12 APPEARANCES

13 MILLER AXLINE & SAWYER
14 Attorneys for Plaintiffs
15 BY: TRACEY L. O'REILLY

16 McDERMOTT WILL & EMERY LLP
17 Attorneys for ExxonMobil
18 BY: LISA GERSON
19 STEPHEN J. RICCARDULLI
20 JAMES A. PARDO

21 BEVERIDGE & DIAMOND
22 Attorneys for Sunoco, Inc.
23 BY: DANIEL M. KRAININ

24 MCCONNELL VALDES LLC
25 Attorneys for Shell Oil
BY: ALEJANDRO J. CEPEDA-DIAZ
(Present via telephone)

SOUTHERN DISTRICT REPORTERS, P.C.
(212) 805-0300

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1 that language or work around it or stipulate around it.

2 That language was sort of a catch-all for in case a
3 document was presented to the witness, you know, on cross,
4 whether they then needed to speak about it. Was not intended
5 to expand their designated opinions as stated in the
6 designations.


7 We've also agreed along these lines and resolve that
8 dispute, that defendants will either give a list of the
9 documents that were relied upon to form the basis of the
10 opinions, or either produce them or identify them, and that
11 plaintiffs have said that with that information, they can then
12 make a decision as to who they really need to depose. And
13 we're hopeful that some of those may actually fall off the
14 calendar, but they're not in a position yet to do that, and
15 we're hopeful that can happen in the next week or so.

16 THE COURT: So this topic called the motion to strike
17 overly broad percipient expert designations, that's what you
18 just spoke to?

19 MR. RICCARDULLI: I did, your Honor.

20 THE COURT: Are you Mr. Anderson?

21 MR. ANDERSON: Yes, Mr. Anderson. The one caveat, I'd
22 say, on the deal that Miss O'Reilly just described is that
23 Chevron's hydrogeologist is out of the country in an
24 international arbitration until the end of June, and so his
25 deposition would occur the week of June 30th, but we're going



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1 to go ahead and get it on schedule.

2 THE COURT: The week of June 30th?

3 MR. ANDERSON: Yes, your Honor.

4 THE COURT: So it's really become a practice of the
5 parties giving themselves extensions regardless of what the
6 Court says. That's not a good thing. It means basically the
7 parties have lost all respect for the Court's orders and just
8 do what they want and there's no deadline that you believe I'm
9 going to keep anyway; so you just do what you want. This
10 doesn't seem appropriate.

11 I mean, this makes me say, well, you can't have until
12 June 15th either. Whatever you don't get done by May 30th,
13 people won't be deposed that's all. I mean, at some point, a
14 Court's order is supposed to mean what it says or there's no
15 respect. Why should there be? You know you're going to get an
16 adjournment every time. Now, he just stands and announces,
17 well, this one's not until June 30th whether you like it or
18 not. That's not going to do it. Maybe he should be stricken
19 as an expert. If he can't be deposed, that's not fair to the
20 plaintiffs; so you lose that expert.

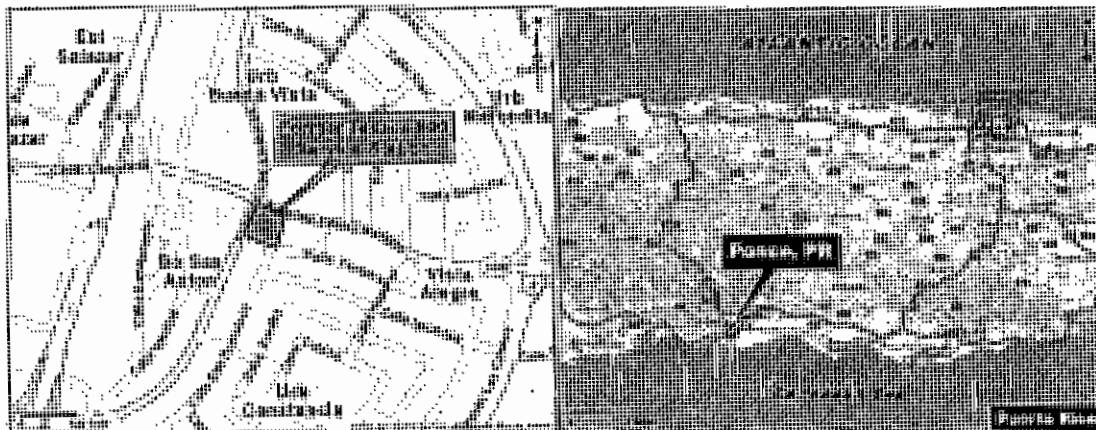
21 I can't have the parties controlling the timing. This
22 is the oldest case in this MDL because everybody gives
23 themselves adjournments, they ignore the Court completely. So
24 if this person is unavailable, I guess you don't have an
25 expert. You asked for a two-week adjournment until June 15th.

EXHIBIT C



**EXPERT OPINION OF JOHN A. CONNOR, P.E., P.G., BCEE, AND
ANTHONY D. DAUS, III, P.G., CONCERNING MTBE IN
GROUNDWATER IN THE VICINITY OF THE FORMER TEXACO
800 SERVICE STATION IN PONCE, PUERTO RICO**

Commonwealth of Puerto Rico et al. vs. Shell Oil Company et al.
U.S. District Court, Southern District of New York
Case No. 07-Civ-10470 (SAS)



Issued: 7 April 2014

Prepared for: King & Spalding LLP



GSI Environmental Inc.

2211 Norfolk, Suite 1000, Houston, Texas 77098-4054 tel. 713.522.6300



**EXPERT OPINION OF
JOHN A. CONNOR, P.E., P.G., BCEE AND
ANTHONY D. DAUS, III, P.G.,
CONCERNING MTBE IN GROUNDWATER
IN THE VICINITY OF THE FORMER
TEXACO 800 SERVICE STATION IN
PONCE, PUERTO RICO**

**Commonwealth of Puerto Rico et al. vs.
Shell Oil Company et al.
U.S. District Court, Southern District of
New York, Case No. 07-Civ-10470 (SAS)**

Prepared for: King & Spalding LLP

Prepared by:

GSI Environmental Inc.
2211 Norfolk, Suite 1000
Houston, Texas 77098-4054
713/522-6300

GSI Job No. G-3583
Issued: 7 April 2014



John A. Connor, P.E., P.G., BCEE

7 April 2014

Date:

Houston, Texas U.S.A.

Location



Anthony D. Daus, III, P.G.

7 April 2014

Date:

Newport Beach, California U.S.A.

Location

7 April 2014



**EXPERT OPINION OF JOHN A. CONNOR, P.E., P.G., BCEE AND
ANTHONY D. DAUS, III, P.G., CONCERNING MTBE IN GROUNDWATER
IN THE VICINITY OF THE FORMER TEXACO 800 SERVICE STATION
IN PONCE, PUERTO RICO**

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**EXPERT OPINION OF JOHN A. CONNOR, P.E., P.G., BCEE AND
ANTHONY D. DAUS, III, P.G., CONCERNING MTBE IN GROUNDWATER
IN THE VICINITY OF THE FORMER TEXACO 800 SERVICE STATION
IN PONCE, PUERTO RICO**

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Detached Groundwater Plumes

In some cases, the MTBE or BTEX plume can “detach” from the source point and move downgradient from the UST site as a separate zone of affected groundwater. “Detached plumes” occur when the source mass is flushed clean by fresh groundwater flow, rainfall recharge, or natural attenuation processes, or selectively removed by source zone remediation - resulting in clean groundwater conditions at the source area and a separate zone of affected groundwater moving away in the downgradient direction. Factors contributing to detached plumes include high groundwater flow velocities, high recharge rates, initial low or diffuse source concentrations – all of which can contribute to a relatively higher rate of depletion of compounds in the source zone compared to the plume area (Ellis, 2000; King and Barker, 1999; Hester and Harrison, 2008; Weaver et al., 1999). The study by Kamath et al. (2012) specifically addressed the presence of detached MTBE plumes, i.e., displacement of the plume mass downgradient from the original source point. They found this condition to occur at only 5% of MTBE sites (2 of 41 sites). Furthermore, these detached plumes were observed to be decreasing in area over time (Kamath et al., 2012). At the vast majority of sites, however, monitoring data show that plumes are not “detached” but, rather, attached to the source area, as demonstrated by a persistent source mass (i.e., affected groundwater and/or free-phase product in the source area) and a continuous plume area diminishing in concentration with distance downgradient.

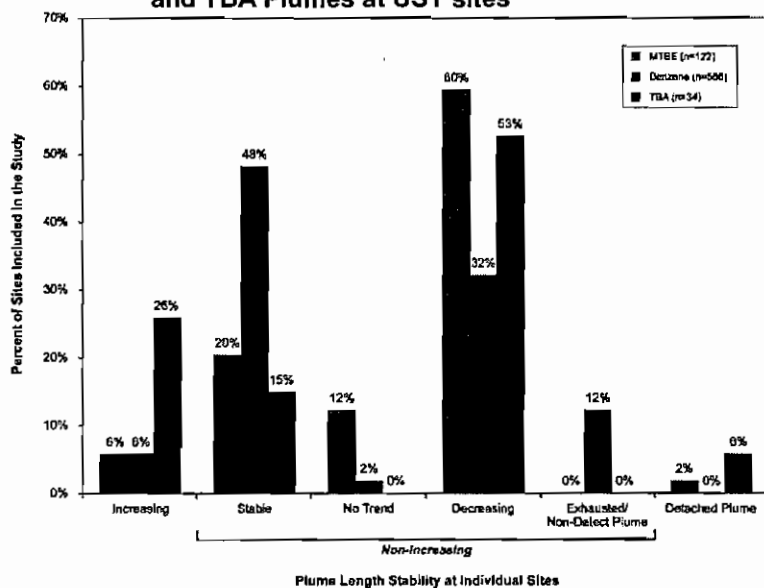
3.3 Gasoline Fuel Plume Stability Conditions

Stability Conditions of Benzene, MTBE, and TBA Plumes

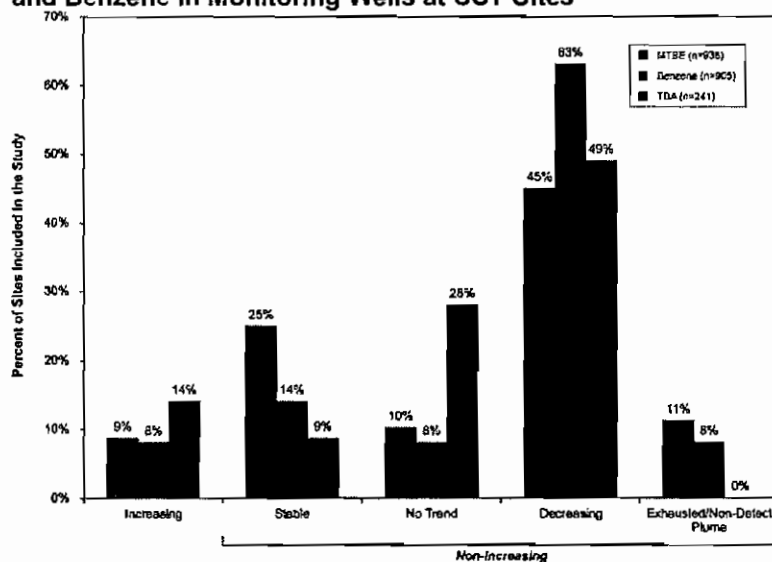
In addition to being of limited length, surveys across the nation show that over 80% of both benzene and MTBE plumes are presently stable, diminishing in size and concentration, or are exhausted. Summaries of the results of plume stability studies for MTBE, benzene, and TBA are presented in Tables 2.A, 2.B, and 2.C, respectively.

Exhibits 8 and 9 summarize the results of individual studies that have characterized plume stability conditions as shrinking, stable, or expanding based upon either: i) the measured plume length vs. time (Shorr and Rifai, 2002; Reid et al., 1999; Reisinger et al., 2000; Mace et al., 1997; Rice et al., 1995; Kamath et al., 2012), or ii) the concentrations measured in monitoring wells vs. time (Rice et al., 1995; Buscheck et al., 1996; Mace et al., 1997; Mace and Choi, 1998; Stevens et al., 2006; Tarr and Galonski, 2007; Kamath et al., 2012). In combination, studies on trends of plume length vs. time have found that over 82% of MTBE plumes and 92% of benzene plumes are in a stable, diminishing, or exhausted condition (i.e., neither expanding nor exhibiting no trend; see Exhibit 8). Similarly, analyses of plume concentrations show that nearly 81% of MTBE plumes and 84% of benzene plumes are exhibiting stable, diminishing, or non-detectable concentrations over time (see Exhibit 9).

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Exhibit 8: Comparison of Plume Length Stability Conditions for MTBE, Benzene, and TBA Plumes at UST sites

Note: Distributions shown above correspond to the weighted average values reported in various scientific surveys, rounded to the nearest 1%.

Exhibit 9: Comparison of Concentration versus Time Trends of MTBE and Benzene in Monitoring Wells at UST Sites

Note: Distributions shown above correspond to the weighted average values reported in various scientific surveys, rounded to the nearest 1%.

Exhibits 8 and 9 also display the trend distributions for TBA plume lengths and concentrations, respectively, as determined by Kamath et al., (2012). These data show that the majority of TBA

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plumes (68%) are stable or shrinking in length, while 26% are increasing. Evaluation of TBA concentration trends found non-increasing trends in 86% of the wells. The moderately higher percentage of wells with increasing TBA concentration trends (14%, compared to 9% and 8% for MTBE and benzene, respectively) may reflect the production of TBA as a by-product of MTBE biodegradation, resulting in temporary replenishment of TBA concentrations until the MTBE source is depleted.

[McHugh et al. (2013) compiled data from over 4,000 UST sites from the California GeoTracker database to evaluate the overall trends of benzene, MTBE, and TBA concentrations in groundwater over time. These monitoring data showed a large decrease in the groundwater concentrations of gasoline constituents over the period of 2001 to 2011 (85% decrease for benzene, 96% for MTBE, and 87% for TBA), measured as the change in the median of the maximum site concentrations over time. The study found that the temporary build-up and subsequent decrease of TBA concentrations could be closely matched by a sequential first-order degradation model, which accounted for the generation of TBA as a product of MTBE degradation, followed by the biodegradation of the TBA itself (McHugh et al., 2013).] *

Diminishing MTBE Plume Concentrations Following Termination of Use

[After 2005, MTBE has no longer been used as a gasoline additive in a number of states (USEPA, 2007) and, based on available records, MTBE has not been used in gasoline supplied to Chevron Puerto Rico, LLC or the current site owner since at least 2005. Consequently, there is no potential for additional mass of MTBE to be released to groundwater at UST sites, meaning that, logically, MTBE plumes should increasingly be found to be in a stable or diminishing condition with time. Two studies have confirmed a relatively rapid reduction of MTBE concentrations in groundwater at UST sites after MTBE was removed from gasoline. Specifically, a University of Connecticut study commissioned by the New Hampshire Department of Environmental Services (Stevens et al., 2006) found that, in the 2 years following termination of MTBE use in Connecticut, MTBE concentrations diminished in 93% of the 83 monitoring wells investigated, with MTBE observed to dissipate rapidly, halving in concentration every 7 months. A similar study of 78 wells in New Hampshire (Tarr and Galonski, 2007) reported that, after termination of MTBE use, 85% of monitoring wells exhibited decreasing concentrations, compared to decreasing concentrations at 68% of monitoring wells prior to the termination of MTBE use in gasoline.] *

3.4 Overview of Regional and Site Hydrogeology

Regional Hydrogeology

The former Texaco 800 Service Station is located approximately 2.3 miles from the southern coast of Puerto Rico in the Municipio of Ponce. In 2005, the United States Geological Survey (USGS) published the results of a multi-year study of the surface water, water quality, and groundwater resources in the Municipio of Ponce. This summary of the regional hydrogeology is based largely on this USGS report (USGS, 2005).

The USGS divided the hydrogeology of the Municipio of Ponce into six terranes or regions. The Site is located in hydrogeologic Terrane 2 near the border with Terrane 1 (Plate 2). The two terranes are hydraulically continuous and together they comprise the coastal aquifer in the Ponce area. The main water producing zone in Terrane 2 is the deeper limestone deposits

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4.3 On-going and anticipated remediation activities by the responsible parties will further reduce source area concentrations and continue to prevent migration of gasoline constituents, including MTBE and TBA, beyond the near vicinity of the service station.

As discussed in detail in Section 4.2 above, MTBE and TBA affected shallow groundwater underlying the Site has been adequately delineated and shown to be limited to the near vicinity of the service station property. Site data collected to date suggests the MTBE plume is stable or decreasing due to the following considerations: i) generally stable or decreasing concentrations in the source area over time based on sampling conducted to date; ii) rapid decrease in concentration with distance from the source; and iii) limited migration distance of affected groundwater beyond the source area. This finding is consistent with typical plume conditions encountered UST sites. As discussed in Section 3.3 of this expert report, nationwide studies have found that a vast majority of benzene and MTBE plumes had exhibited plume conditions that were stable or decreasing.

On-going full-scale remediation activities at the Site, which commenced in October 2013, were designed to reduce source zone concentrations of gasoline fuel constituents, including MTBE and TBA. This reduction of the source zone mass will facilitate continued biodegradation of the plume constituents and further prevent plume migration beyond the near vicinity of the service station property.

Previous and on-going remediation activities are discussed in detail in Section 4.1 of this expert report. The in-situ chemical oxidation remediation approach currently implemented at the Site, utilizing a chemical oxidant/surfactant solution (RegenOx – Part A and PetroCleanze by Regenesis) is a proven and effective technology for remediating a variety of contaminants, including MTBE, TBA, and other gasoline constituents (California MTBE Research Partnership, 2004; Fiedler et al., 2004; ITRC, 2005a; ITRC, 2005b; Kelley et al., 2003; SWRCB, 2010; USEPA, 2004). One of the key advantages of using chemical oxidation technologies in-situ is the potential destruction of MTBE in an effective manner over a relatively short timeframe (CA MTBE Research Partnership, 2004; USEPA, 2004). The RegenOx – Part A and PetroCleanze formulation by Regenesis recently injected at the Site has been demonstrated to effectively treat benzene, as well as MTBE (Regenesis, 2014).

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6.0 CITED REFERENCES

Expert Reports and Depositions

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7 April 2014

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EXHIBIT D

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MILLER & AXLINE
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DUANE C. MILLER
MICHAEL AXLINE

TRACEY L. O'REILLY
DANIEL BOONE
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DAVE E. BLUM
MOLLY MCGINLEY HAN

March 12, 2014

Via LNFS and Email (ccorrell@kslaw.com and lgerson@mwe.com)

Charles Correll, Jr., Esq.
King & Spalding, LLP
101 Second Street
Suite 2300
San Francisco, CA 94105

Lisa Gerson, Esq.
McDermott Will & Emery
340 Madison Ave.
New York, New York 10173-1922

Re: Commonwealth of Puerto Rico, et al. v. Shell Oil Company, et al., 07-CIV-10470
John Connor and Peter Zeeb Reliance Materials

Dear Counsel:

I write concerning documents missing from John Connor and Peter Zeeb's reliance materials. Mr. Connor and Dr. Zeeb have not produced all the data used to produce certain articles cited in their expert reports. Plaintiffs are requesting that all the data, spreadsheets, databases, and analysis used to produce the following cited articles be produced immediately:

- *Long Term Behavior of MTBE Plumes of Exceptional Length*, McDade, et al. submitted for publication
- *Progress in Remediation of Groundwater at Petroleum Sites in California*, McHugh, et al. (2013)
- *Use of Long-Term Monitoring Data to Evaluate Benzene, MTBE, and TBA Plum Behavior in Groundwater at Retail Gasoline Site*, Kamath, et al. (2012)

Sincerely,

Dictated but not read;
sent to avoid delay

Mike Axline

cc: All Counsel (via LNFS)

EXHIBIT E



KING & SPALDING

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May 19, 2014

VIA LNFS

Michael Axline
Miller & Axline
1050 Fulton Avenue, Suite 100
Sacramento, California 95825

Re: *In Re MTBE Litigation*, MDL 1358; *Commonwealth of Puerto Rico, et al. v. Shell Oil Co., et al.*; 07 CIV. 10470 (SAS)

Dear Mike:

This letter responds to your May 12, 2014 letter (incorrectly dated March 12, 2014) to Mr. Charles Correll and Ms. Lisa Gerson requesting documents you describe as missing from John Connor's and Peter Zeeb's reliance materials. You request that we immediately produce "all the data, spreadsheets, databases, and analysis used to produce":

- Long Term Behavior of MTBE Plumes of Exceptional Length, McDade, et al. submitted for publication.
- Progress in Remediation of Groundwater at Petroleum Sites in California, McHugh, et al. (2013).
- Use of Long-Term Monitoring Data to Evaluate Benzene, MTBE, and TBA Plum Behavior in Groundwater at Retail Gasoline Site, Kamath, et al. (2012).

Briefly, there are no documents missing from the reliance materials produced in connection with Mr. Connor's and Mr. Zeeb's expert reports. The "data, spreadsheets, databases and analysis used" by McDade *et al*, McHugh *et al* and Kamath *et al* to write their articles are not reliance materials for the Puerto Rico expert reports submitted by Mr. Connor and Mr. Zeeb. Rather, Mr. Connor's and Mr. Zeeb's reliance materials are the articles written by McDade *et al*, McHugh *et al* and Kamath *et al*., and those articles have been produced.

As you know, "Reliance Materials" is defined in CMO 112 and includes "all files, documents, texts and underlying data or manipulations of such data reviewed or relied upon by that expert in forming the basis for his or her opinion" (emphasis added). CMO 112 does not

Mike Axline
May 19, 2014
Page 2

include as Reliance Materials "data used to produce certain articles cited in their expert reports". Consistent with the foregoing, Plaintiffs' experts did not produce the underlying data used in articles that they referenced as support for their opinions and conclusions. Nor is there a requirement that any expert obtain underlying data for cited articles.


Mr. Connor relied on the articles written by McHugh *et al* and Kamath *et al* as support for certain opinions in his report. Mr. Connor did not review or rely upon the "files, documents, texts and underlying data or manipulations of such data" used by McHugh *et al* or Kamath *et al*. Mr. Connor did not even reference the McDade *et al* article. Rather, he includes in his expert report selected references also used by McDade *et al*. Those selected references are listed in Table 3 of the Connor/Daus Puerto Rico report, and those references were produced to Plaintiffs as part of Connor/Daus's reliance materials.

Mr. Zeeb relied on the articles written by McDade *et al* and Kamath *et al* as support for certain opinions in his report. Mr. Zeeb did not review or rely upon the "files, documents, texts and underlying data or manipulations of such data" used by McDade *et al* or Kamath *et al*. Mr. Mr. Zeeb did not rely on the McHugh *et al* article. The McDade *et al* and Kamath *et al* articles were produced to Plaintiffs as part of Mr. Zeeb's reliance materials.

In short, Defendants have produced the reliance materials that CMO 112 requires. Further, to clear up any lingering confusion, a supplemental Connor/Daus report is being served today which includes new Tables 1.A, 1.B and 1.C.

Please let me know if you have any questions.

Very truly yours,



James J. Maher

cc: Ms. Lisa Gerson

EXHIBIT F

Law Offices of
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A Professional Corporation



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TRACEY L. O'REILLY
DANIEL BOONE
JUSTIN MASSEY
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DAVE E. BLUM
MOLLY MCGINLEY HAN

May 20, 2014

VIA LNFS and Email

James J. Maher, Esq.
King & Spalding LLP
1100 Louisiana Suite 4000
Houston, Texas 77002

Re: *Commonwealth of Puerto Rico, et al. v. Shell Oil Co., et al.*
Reliance Materials (John Connor and Peter Zeeb)

Dear James:

This letter responds to the letter you sent yesterday regarding reliance materials for John Connor and Peter Zeeb. I had asked you to produce the underlying data for three articles: (1) Long Term Behavior of MTBE Plumes of Exceptional Length, McDade, et al.; (2) Progress In Remediation of Groundwater At Petroleum Sites In California, McHugh, et al.; and (3) Use of Long Term Monitoring Data to Evaluate Benzene, MTBE, and TBA Plume Behavior in Groundwater at Retail Gasoline Site, Klamath, et al.

Your response asserts that the underlying data for these articles does not constitute "reliance materials" because, although Mr. Connor and Mr. Zeeb cited to and/or relied on the articles, they did not rely on the underlying data. Your letter does not address the fact that Mr. Connor was a co-author on these articles. He therefore clearly did rely on the underlying data in forming his opinions, and has that underlying data readily available.

Statements in these three articles are central to Mr. Connor's and Mr. Zeeb's opinions and Plaintiffs have the right to examine the underlying data for the articles, both in responding to Mr. Connor's and Mr. Zeeb's opinions and in responding to Mr. Connor's and Mr. Zeeb's criticisms of Plaintiffs' experts. Since Mr. Connor is a co-author of the articles and has the underlying data readily available, there is no good reason not to produce the data.

James Maher, Esq.
May 20, 2014
Page 2

I renew my request that the underlying data for these articles be produced immediately. If the data is not produced, Plaintiffs will request a hearing with Judge Scheindlin. If you would like to discuss this matter, please feel free to give me a call.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael Axline', written over the word 'Sincerely,'.

Michael Axline
Counsel for the Commonwealth of Puerto Rico

MA/kh

cc: All Counsel

EXHIBIT G



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May 30, 2014

VIA LNFS

Michael Axline
Miller & Axline
1050 Fulton Avenue, Suite 100
Sacramento, California 95825

Re: *In Re MTBE Litigation, MDL 1358; Commonwealth of Puerto Rico, et al.
v. Shell Oil Co., et al.; 07 CIV. 10470 (SAS)*

Dear Mike:

This letter responds to your May 22, 2014 voice mail and your May 20, 2014 reply to my May 19, 2014 letter regarding documents you describe as missing from John Connor's and Peter Zeeb's reliance materials. This letter also follows our discussion on May 24, 2014 regarding these issues and the compromise agreement I offered with respect thereto. I have been waiting on your return call which I expected on May 25 or May 26, 2014. Today, I understand that Mr. Miller raised this issue at the deposition of Ms. Barbara Mickelson, and I am, therefore, writing this letter to memorialize my prior offer of compromise and to request that you call me on Monday, June 2, 2014 to discuss.

Briefly, Plaintiffs have requested that we produce "all the data, spreadsheets, databases, and analysis used to produce":

- Long Term Behavior of MTBE Plumes of Exceptional Length, McDade, et al. submitted for publication.
- Progress in Remediation of Groundwater at Petroleum Sites in California, McHugh, et al. (2013).
- Use of Long-Term Monitoring Data to Evaluate Benzene, MTBE, and TBA Plum Behavior in Groundwater at Retail Gasoline Site, Kamath, et al. (2012).

I have informed you that, as I stated in my May 19, 2014 letter, Mr. Connor did not even make reference to the McDade article. It is not published. Neither the article nor the underlying data is part of Mr. Connor's reliance materials. We have no obligation to produce it.

Mike Axline
May 30, 2014
Page 2

As for the Kamath article, the fact that Mr. Connor cites to a peer-reviewed and published article, like Kamath, as support for his opinions in his Puerto Rico expert report does not make the underlying data part of his reliance materials under either Federal Rule 26 or CMO 112. Neither Rule 26 nor CMO 112 make any special exception for articles that are authored or co-authored by the expert. The question is whether the underlying data was relied upon for the opinions of the expert's report in the lawsuit at issue. I have told you that Mr. Connor did not rely on the underlying data to prepare his Puerto Rico report.

Your firm previously requested the underlying data for the Kamath article in the Orange County case. You are, therefore, aware that the underlying data that you seek is confidential, and you are aware that Mr. Connor simply has no authority to produce it.


I note that Dr. Graham Fogg cites to a number of articles that he authored or co-authored as support for his opinions in this case. Dr. Fogg also cites to both McHugh and McDade as support for his opinions regarding plume stability and migration. Plaintiffs did not produce "all the data, spreadsheets, databases, and analysis used to produce" Dr. Fogg's articles, and Plaintiffs also did not produce the data for McHugh and McDade. Under Federal Rule 26 and CMO 112, you have no obligation to do so unless Dr. Fogg relied on the data for his opinions in his Puerto Rico report. We presume that he did not or you would have produced them with his reliance materials. We presume that he relied on the articles.

Further, Plaintiffs have no obligation to produce the data from Dr. Fogg's authored or co-authored articles simply because he has the data "readily available." That is not a requirement of the Rule or the Court's order. And, similarly, Mr. Connor has no obligation to produce the underlying data from his authored or co-authored reports, like the McHugh article, simply because it is "readily available." The issue is, as stated above, a question of reliance.

With respect to Mr. Zeeb, he did not rely on the McHugh article. The McDade and Kamath articles were produced to Plaintiffs as part of Mr. Zeeb's reliance materials. Mr. Zeeb does not have "all the data, spreadsheets, databases, and analysis used to produce" those two articles. Because he does not have that data, he could not and did not rely upon it.

As we discussed during our call on May 24, 2014, however, in order to resolve this issue, we have offered a compromise. If you will agree to drop your request to us for the Kamath data, we will agree to produce the Geotracker data used in the McHugh article. As Mr. Miller only raised the McHugh data today, I assume you are agreeable to this. Please let me know if you will agree or call me at your earliest convenience so that we may continue our discussion.

Very truly yours,



James J. Maher

JM/

EXHIBIT H

Dave E. Blum

From: Duane Miller [dmiller@toxic torts.org]
Sent: Friday, June 20, 2014 12:08 PM
To: 'Correll, Charles'
Cc: Dave E. Blum; toreilly@toxic torts.org
Subject: RE: Puerto Rico - McHugh Data Meet and Confer

Like any prospective purchaser in a take it "as is" transaction, you ask more questions before you say "yes".

If we can obtain production of GSI's work product/the data behind the McHugh article in a useable format, and any related documents like emails, that will suffice. We are not interested in battles which ask GSI to do our work for us. After conferring with consultants and carefully reviewing your email it is less than clear that you will produce all responsive documents, or only those specifically described. Is your email descriptive or comprehensive?

Using your Paragraph numbers, will the documents produced include (1) the entire original download and the compiled SQL database, with (4) the Access files, and with the three remediation files described in (5) and the excel file(s) described in (6) including the organized remediation and site data, as well as the analyses performed(output files)? Any other data downloaded from Geo Tracker as part of this project should also be included. Will you produce related emails and other documents described in the request?

In item (2) with regards to groundwater. Which fields and values were selected/excluded (Matrix, LOCID, etc.)?

In Item (2) with regards to E flags: Which fields and values were selected/excluded?

In Item (5): Which fields and filed values were used to determine the remediation performed at sites. Please include the select queries for each remediation type.

From your description, the data appears to be useable and we would agree not to request "additional manipulation of the data" beyond what has already been done. If the data cannot be used in the same way your consultants did without proprietary software, or disclosure of available software, then we would need appropriate cooperation. Historically, this was accomplished though reasonably brief memos which have not presented a problem for anyone. Will you agree to provide the disclosure described above and limited cooperation to make the data useable if needed?

Your email does not directly address the Kamath article or Paragraphs 25 through 30 of the deposition notice concerning communications with the API, Groundwater Technical Group, and the journal. I assume you understand that this proposed resolution of the request for Conner's work product/data would not eliminate the need to produce those documents.

-----Original Message-----

From: Correll, Charles [mailto:CCorrell@KSLAW.com]
Sent: Thursday, June 19, 2014 3:25 PM
To: Duane Miller
Cc: Dave E. Blum; Tonga Garcia; Mike Axline; Tenaya Hydrick; Johnson, Tina; Maher, James; Anderson, Jeremiah
Subject: Puerto Rico - McHugh Data Meet and Confer

Duane -

As I stated on our call yesterday, in order to resolve our dispute over the McHugh data, I am willing to produce it as GSI has it only on the condition that I will get no further inquiries to supplement it, manipulate it, etc. Again, I do not believe CMO 112 requires the production, and to date you have not once pointed me to a provision of the CMO that does. I make this offer to get past this dispute and on with finishing discovery. I won't do it if it just means I have bought another prolonged fight.

You asked for a description of what we can produce and generally what it is. Here you go:

(1) The authors downloaded all of the data from California Geotracker: http://geotracker.waterboards.ca.gov/data_download_by_county.asp. The data is still publicly available from this web site. As you know, the data is organized by county, with several files for each county. The "EDF" file for each county has the GW data. Other files contain information about well construction and location. The authors downloaded each file for each county and combined them into a single database.

(2) The authors compiled the downloaded data into a single SQL database and conducted the following data "clean-up": i) removed samples that are not groundwater (e.g. Location IDs contain the word BLANK), ii) made units of measure uniform for each analyze, and iii) identified and deleted concentrations reported with E flags.

(3) Following the data "clean-up", the authors used a query to extract all of the GW data for the four chemicals of interest from the master SQL database: benzene, ethylbenzene, MTBE, and TBA. This GW data was then analyzed by the authors using Access and Excel software and the procedures described in the McHugh article.

(4) The "cleaned-up" groundwater data used by the authors was compiled into four Access files, one for each of the four chemicals.

(5) The information on remediation technologies used at a site is tracked in different files. The authors' analysis of this information can be obtained from the following three files:

- * sites.txt - Contains data pertaining to the sites tracked in GeoTracker
- * regulatory_activities.txt - Contains regulatory activities for sites tracked in GeoTracker
- * status_history.txt - Contains the status history for sites tracked in GeoTracker

... from this web page:

http://geotracker.waterboards.ca.gov/data_download.asp

(6) Starting with these three files, as described in the paper, the authors analyzed remediation technologies for 3,941 sites. 3,941 is the number of sites that had information on both benzene/MTBE concentration and remediation technology. The authors compiled an Excel spreadsheet that lists these sites and the remediation technologies used at each site.

(7) Starting from these five files (i.e., four Access files with GW data and one Excel files with remediation technologies), the authors explain in the paper the analyses conducted to obtain the results presented.

Subject to our agreement that you will accept the data as is, and will not make further request for data or manipulation of the data related to McHugh, we can send you six thumb drives containing the information described in paragraphs (1), (4), (6). I can send this out tomorrow if you agree.

Again, I make this offer of compromise to get past this dispute, but won't buy into another one. Let me know if you agree that producing the data "as is" will resolve our dispute over the data.

Charles

King & Spalding Confidentiality Notice:

This message is being sent by or on behalf of a lawyer. It is intended exclusively for the individual or entity to which it is addressed. This communication may contain information that is proprietary, privileged or confidential or otherwise legally exempt from disclosure. If you are not the named addressee, you are not authorized to read, print, retain, copy or disseminate this message or any part of it. If you have received this message in error, please notify the sender immediately by e-mail and delete all copies of the message.

EXHIBIT I

Groundwater

Progress in Remediation of Groundwater at Petroleum Sites in California

by Thomas E. McHugh¹, Poonam R. Kulkarni², Charles J. Newell², John A. Connor², and Sanjay Garg³

Abstract

Quantifying the overall progress in remediation of contaminated groundwater has been a significant challenge. We utilized the GeoTracker database to evaluate the progress in groundwater remediation from 2001 to 2011 at over 12,000 sites in California with contaminated groundwater. This paper presents an analysis of analytical results from over 2.1 million groundwater samples representing at least \$100 million in laboratory analytical costs. Overall, the evaluation of monitoring data shows a large decrease in groundwater concentrations of gasoline constituents. For benzene, half of the sites showed a decrease in concentration of 85% or more. For methyl tert-butyl ether (MTBE), this decrease was 96% and for TBE, 87%. At remediation sites in California, the median source attenuation rate was 0.18/year for benzene and 0.36/year for MTBE, corresponding to half-lives of 3.9 and 1.9 years, respectively. Attenuation rates were positive (i.e., decreasing concentration) for benzene at 76% of sites and for MTBE at 85% of sites. An evaluation of sites with active remediation technologies suggests differences in technology effectiveness. The median attenuation rates for benzene and MTBE are higher at sites with soil vapor extraction or air sparging compared with sites without these technologies. In contrast, there was little difference in attenuation rates at sites with or without soil excavation, dual phase extraction, or in situ enhanced biodegradation. The evaluation of remediation technologies, however, did not evaluate whether specific systems were well designed or implemented and did not control for potential differences in other site factors, such as soil type.

Introduction

Currently, there are over 85,000 leaking underground fuel tank (LUFT) sites (also called underground storage tank [UST] sites) in the United States undergoing remediation under state regulatory clean-up programs (United States Environmental Protection Agency [USEPA], 2012a). In addition, there are thousands of other sites with contaminated groundwater currently undergoing clean-up. Tracking the overall progress in site remediation has long been a challenge because there is no centralized system for tracking these sites. Most states track sites by regulatory programs (e.g., LUFT, Resource Conservation and Recovery Act, Superfund, etc.) and do not maintain a single inventory of all contaminated sites. Although many individual regulatory programs maintain databases of sites, the information tracked varies from program to program (Connor and McHugh 2002). The USEPA has found that data quality and availability for many of these databases limit the utility of these databases for the evaluation of remediation progress (USEPA 2012b).

Despite the limitations in available data, the USEPA and others have attempted to evaluate progress in site remediation. Connor and McHugh (2002) found that implementation of risk-based corrective action for state LUFT programs resulted in a significant increase in case closure and decrease in case backlog. Subsequently, the USEPA published the results of a detailed study on the characteristics of backlog sites (USEPA 2012b). Their study found that 71% of the open LUFT sites were more than 10 years old. However, only about 40% of the sites closed from 2006 through 2008 were greater than 10 years old, reflecting the challenges associated with attaining closure for older sites. Although the national LUFT case backlog has decreased from a high of 172,000 sites in 1995 to 85,000 sites in 2012, nationally, there continues to be approximately 7000 LUFT releases reported per year (including both new releases and newly discovered historic releases), indicating an on-going need to understand the effectiveness of remediation approaches and technologies.

A number of previous studies have utilized historical groundwater monitoring data to understand plume behavior and remediation progress at LUFT sites (Reisinger et al. 2000; Hattan et al. 2003; Shih et al. 2004; Kamath et al. 2011). However, these studies typically utilized data from less than 100 sites with some having as little as 2 or 3 years of monitoring data. The purpose of this study has been to utilize the California GeoTracker database to

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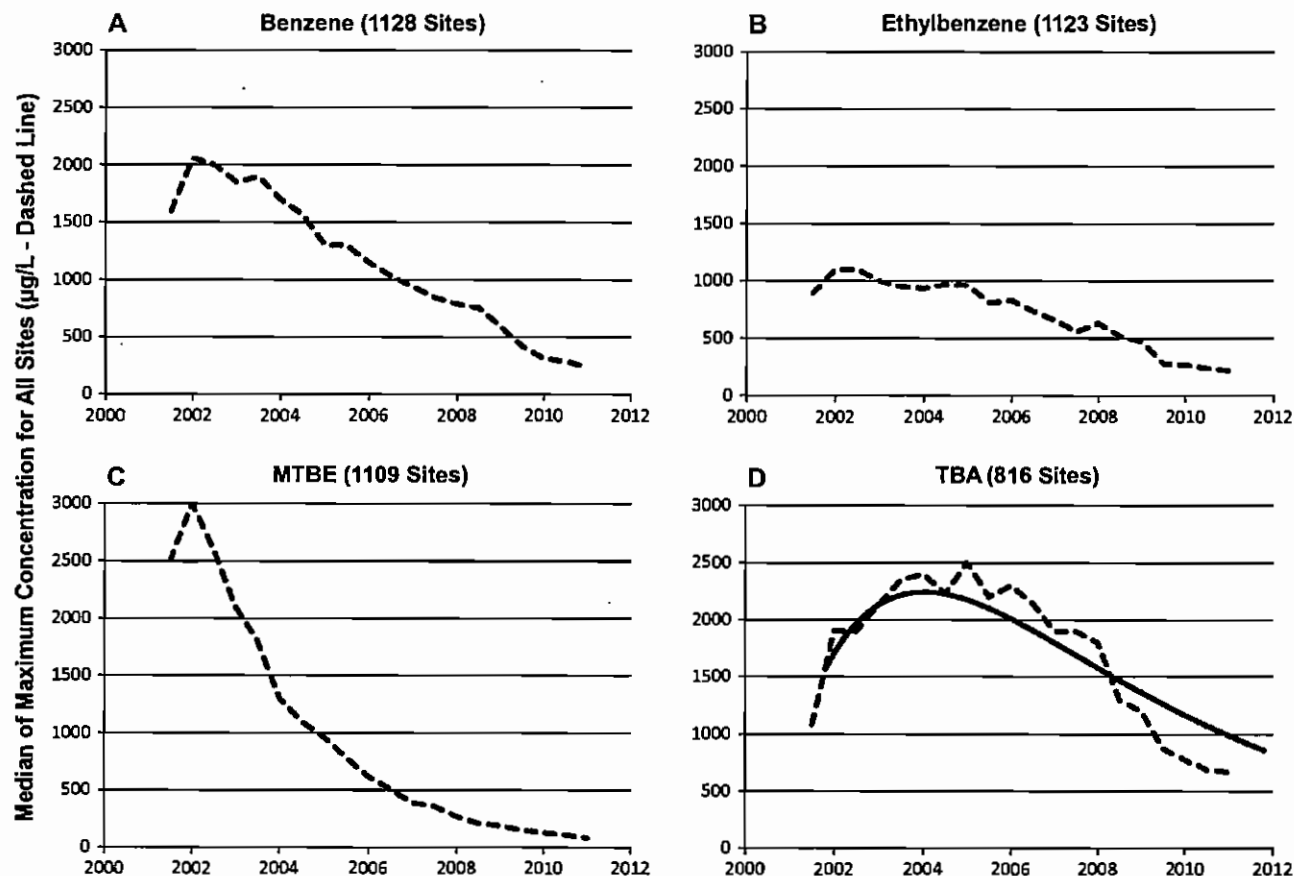


Figure 2. Maximum site concentration vs. time for all sites with continuous groundwater monitoring data over the evaluation period of June 2001 to June 2011. The solid line on TBA graph shows concentration predicted by sequential degradation model.

Concentration Changes at Individual Sites

The change in dissolved concentrations of gasoline constituents at individual sites was evaluated by comparing historical maximum site concentrations (2001 to 2011) to recent maximum site concentrations (2010 to 2011). This analysis included all sites that were open in 2010 or 2011 and had 4 or more years of monitoring data in the GeoTracker database (rather than only sites with continuous monitoring records from 2001 to 2011). Figure 3 presents the reduction in maximum site benzene concentration for 4404 individual sites that met these criteria. Figure 4 summarizes the range of concentration decreases in benzene, ethylbenzene, MTBE, and TBA for sites that met the same criteria. In each panel of the figure, the sites are ranked from smallest decrease in constituent concentration to largest decrease in constituent concentration. For each constituent, a small percentage of the sites show no decrease in constituent concentration indicating that the historic maximum concentration occurred during 2010 or 2011. This may reflect either new releases at these sites or additional site investigation activities that more accurately characterized the source areas. Overall, the analysis of reduction in maximum site concentration shows that the median reduction in maximum site concentration has been 85% for benzene, 82% for ethylbenzene, 96% for MTBE, and 87% for TBA. Although

the historical maximum TBA concentration commonly occurs later in the monitoring record, the observation of a median 87% reduction from the historical maximum TBA concentration suggests significant overall progress in remediation.

Source Attenuation Rates for Benzene and MTBE

As discussed in the Analysis Methods section, we determined source attenuation rates for all sites in the database with 5 or more years of monitoring data available during the time period of 2001 to 2011. The source attenuation rates were determined using the maximum site concentrations over time. A benzene source attenuation rate was determined for 4765 sites and an MTBE source attenuation rate was determined for 4284 sites. Source concentrations were decreasing (i.e., the k_{source} values were positive) for benzene at 76% of the sites and for MTBE at 85% of the sites. The median k_{source} (including sites with negative k_{source} values) was 0.18/year for benzene and 0.36/year for MTBE, corresponding to a source half-life of 3.9 and 1.9 years, respectively. Over a 10-year period, the median attenuation rates would result in an 83% decrease in benzene concentration and a 97% decrease in MTBE concentration. These values are similar to the observed median concentration decreases observed for sites in California (see Figure 4).

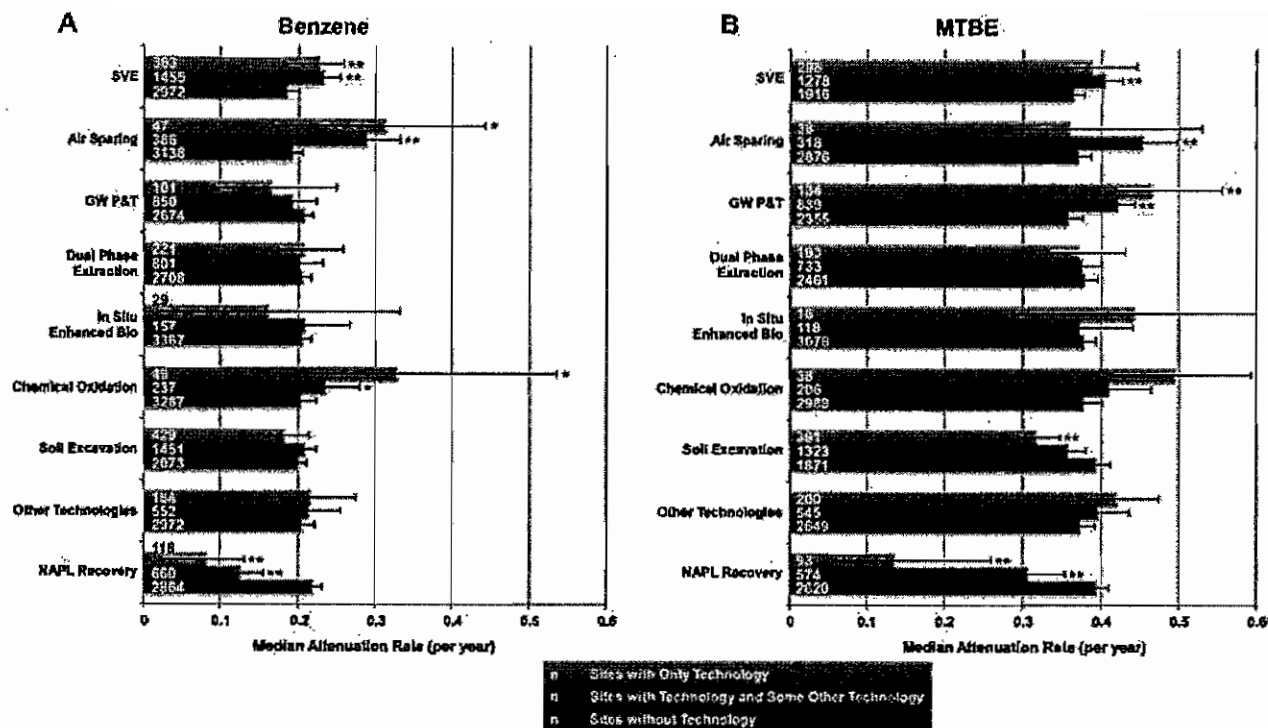


Figure 5. Effect of remediation technology on source attenuation rate. Figure shows median attenuation rates for (1) sites where the technology was the only technology applied (green bar); (2) all sites where the technology was applied including sites where other technologies were also applied (red bar); and (3) sites where the technology was not applied but other remediation technologies were applied (blue bar). The error bars show the 95% confidence intervals for the median attenuation rates. The number of sites is shown at the bottom of each bar. * = Statistical difference compared to sites without the technology by Mann-Whitney *U*-test ($p < 0.05$), ** = statistical difference ($p < 0.01$).

concentrations of constituents in groundwater. The evaluation of differences in median attenuation rates between large groups of sites provides confidence that the results are not being significantly influenced by anomalous results from a small number of sites where the technology may not have been properly applied. Statistical differences between sites with specific technologies vs. sites without specific technologies (but with a mix of other technologies) were evaluated using the Mann-Whitney *U*-test.

On the basis of this comparison, sites where either SVE or air sparging was applied had statistically significantly higher source attenuation rates for both benzene and MTBE. For the group of all sites with SVE (including those with other technologies), the median source attenuation rate was 28% higher for benzene and 11% higher for MTBE compared with sites without SVE. For the group of all sites with air sparging, the median source attenuation rate was 53% higher for benzene and 22% higher for MTBE compared to sites without air sparging. For the group of all sites with groundwater pump and treat there was a statistically significantly higher MTBE source attenuation rate (by 17%), but the difference in the benzene source attenuation rate was not statistically significant. The group of all sites with chemical oxidation had statistically significantly higher benzene source attenuation rates by 20% compared with sites without chemical oxidation but the difference in MTBE source attenuation rates was not statistically

significant. The source attenuation rates at sites with dual phase extraction, enhanced in situ biodegradation, or soil excavation were not significantly higher than at sites without these technologies. Sites with NAPL recovery had statistically significantly lower median benzene and MTBE source attenuation rates (–41 and –21%, respectively) compared with sites without NAPL recovery; however, no information was available to account for differences in original release volume, which may have been larger at sites where NAPL recovery was conducted.

The effectiveness of MNA as a remediation technology could not be directly evaluated because less than 100 sites of 3491 sites with information on remediation technology were identified as having MNA as the only remediation technology (i.e., no active remediation). The other 170 sites where MNA was identified as a remediation technology were also identified as having an active remediation technology. However, an earlier study based on a more detailed evaluation of a smaller number of sites found no significant difference in attenuation rates between MNA sites and sites with active groundwater remedies (Kamath et al. 2011).

The comparison of source attenuation rates at sites with and without individual remediation technologies suggests that commonly applied technologies differ in their effectiveness on remediation of gasoline constituents in groundwater. For example, air sparging and soil

EXHIBIT J

Daus 06-12-2014 ROUGH DRAFT

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RD1

¶ 1 UNITED STATES DISTRICT COURT
 2 SOUTHERN DISTRICT OF NEW YORK

3	IN RE: METHYL TERTIARY BUTYL)	
4	ETHER ("MTBE") PRODUCTS LIABILITY)	Master File
	LITIGATION)	No. 1:00-1898
	-----)	
5	This document relates to:)	MDL 1358 (SAS)
	COMMONWEALTH OF PUERTO RICO,)	
)	Page 1

Daus 06-12-2014 ROUGH DRAFT

6 et al.,

Plaintiffs,

No. M21-88

7 vs.

SHELL OIL CO., et al.,

Defendants.

8 Case No. 07-CIV-10470 (SAS)

9 The videotaped deposition of ANTHONY DAUS,
called for examination, taken pursuant to the Federal
10 Rules of Civil Procedure of the United States District
Courts pertaining to the taking of depositions, taken
11 before PETER TORREANO, CSR No. 7623, a Certified
Shorthand Reporter of the State of California, at the
12 law offices of King & Spalding, LLP, 101 Second Street,
Suite 2300, San Francisco, California, on June 12,
13 2014, at 10:05 a.m.

RD2

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¶ 1 . PRESENT:

2 ON BEHALF OF THE PLAINTIFFS:

3 MILLER, AXLINE & SAWYER
1050 Fulton Avenue, Suite 100
4 Sacramento, California 95825-4225
(916) 488-6688
5 By: DUANE MILLER
dmiller@toxictorts.org
6

7 ON BEHALF OF DEFENDANTS CHEVRON PUERTO RICO, LLC,
ETC. AND CHEVRON DEFENDANTS:

8 KING & SPALDING, LLP
9 101 Second Street, Suite 2300
San Francisco, California 94107
10 (415) 318-1209
By: CHARLES C. CORRELL, JR.

Daus 06-12-2014 ROUGH DRAFT

15 API study described in requests 25, 26, 27, 28?

16 A. Request 25. I produced the paper which is
17 what I read. 26? Yeah. 25 doesn't refer to the
18 paper. It refers to the documents that went into the
19 paper. So I misread 25. It says documents sent to any
20 member of API. I have a copy of the McHugh paper and
21 that's what I read.

22 27. I just have a copy of the McHugh paper,
23 and that was produced.

24 Q. And nothing else concerning the paper?

25 A. I didn't see anything else concerning the

RD10

¶ 1 paper. I read the paper, the published paper.

2 Q. Did you talk to anyone employed by GSI in
3 Houston to see if they had any of the documents
4 responsive to requests number 25 through 28?

5 A. No.

6 Q. Did you make any attempt to obtain any
7 documents they had responsive to those requests?

8 A. I didn't rely on them. So I didn't have a
9 need to get them.

10 Q. Requests number 29. The paper by McHugh and
11 others including John Connor; have you read that paper?

12 MR. CORRELL: Objection. Vague.

13 THE DEPONENT: I read the final published
14 version. I didn't read a prepublication version.

15 BY MR. MILLER:

16 Q. Did you consider it in forming opinions in
17 this case?

18 A. If I didn't read the prepublication version if
19 there was one.

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20 Q. Did you consider the published version of the
21 paper in this case?

22 A. I didn't rely upon it, but I did consider it.
23 I read the paper.

24 Q. Isn't it a fact that the expert report you
25 signed in this case cites and relies on that paper?

RD11

¶ 1 A. That would be John Connor's portion of the
2 report that he prepared and in reading the report I
3 read the material that John had prepared.

4 Q. Is there anything in the report that
5 identifies which sections of the report were written by
6 you?

7 A. No.

8 Q. And you signed the report as if you were a
9 co-author of the entire report; correct?

10 MR. CORRELL: Objection. Argumentative.

11 THE DEPONENT: I signed the report.

12 MR. MILLER: We'll mark that in a minute.

13 BY MR. MILLER:

14 Q. Did you make any attempt to obtain documents
15 from editors or reviewers of the prepublication version
16 of the McHugh article?

17 A. No.

18 Q. Request number 31. All data that you
19 considered, reviewed or relied on. Have you produced
20 that?

21 A. Yes.

22 Q. Did you bring some materials with you today to
23 help refresh your memory on the details of this case?

24 A. Yes.

Daus 06-12-2014 ROUGH DRAFT

23 MR. CORRELL: Objection to the extent it
24 misstates testimony.

25 THE DEPONENT: Right. I relied on the entire

RD18

¶ 1 document. This really is just what I wanted to have
2 with me to assist me during the deposition.

3 BY MR. MILLER:

4 Q. Right. So did you separately produce a copy
5 of the binders with tabs so that we would have the
6 subset of the larger group of documents organized in
7 the way you do?

8 A. I did not produce a copy of these binders.

9 MR. MILLER: Exhibit 2.

10 (EXHIBIT 2 MARKED FOR IDENTIFICATION.)

11 MR. MILLER: This is a statement objecting to
12 the notice of your deposition. It's being marked for
13 the record for legal reasons. I note that there is no
14 objection to the production of your work product
15 including the binders, but they were not produced.

16 I will confer with counsel.

17 MR. CORRELL: And I will just state on the
18 record that I don't believe any expert has produced
19 their binders. Certainly Anthony Brown didn't. At a
20 recent deposition you asked for a courtesy copy of one
21 and we agreed today it, but all the documents in these
22 binders have been produced.

23 MR. MILLER: The fact that you produced a
24 larger document, not the subset the witness is using
25 and certainly not organized in this way, is not

RD19

¶ 1 satisfactory. I assume you'll agree to have a copy

Daus 06-12-2014 ROUGH DRAFT

2 made. I assume you will agree to let me see it, but
3 this is during the deposition. So that's a problem.
4 And I'm not waiving our concerns about that timing.

5 MR. CORRELL: And I'll -- just so the record
6 is clear we don't believe that CMO 112 requires the
7 production of these binders, but we're certainly glad
8 to get you a copy if you want them.

9 MR. MILLER: Actually, the CMO 112 explicitly
10 states that all reliance materials are to be produced
11 and this witness has made it exquisitely clear that
12 these are the materials he's relying on among others.

13 MR. CORRELL: No. He's made it exceedingly
14 clear that he brought some documents in to try to be
15 able to give you detailed answers at a deposition. All
16 of the reliance materials have been produced.

17 (EXHIBIT 3 MARKED FOR IDENTIFICATION.)

18 BY MR. MILLER:

19 Q. What is Exhibit 3, sir?

20 A. Exhibit 3 is a copy of my CV, my curriculum
21 vitae.

22 Q. I understand it has been updated in some way
23 and is somewhat different than what was attached to
24 your expert report. Could you just describe generally
25 what the change or changes are.

RD20

¶ 1 A. Right. There were two changes. I added a
2 presentation at the bottom of the presentation list,
3 practical guidelines for evaluation of base line
4 groundwater quality and potential impacts in areas of
5 shale gas extraction. That would have been presented
6 in March 2014 at the AEHS conference in San Diego.

Daus 06-12-2014 ROUGH DRAFT

16 this paper is attributable to remediation?

17 MR. CORRELL: Objection. Vague. Incomplete
18 hypothetical.

19 THE DEPONENT: I haven't thought about it. I
20 need to kind of think about it a bit to see how to do
21 that.

22 BY MR. MILLER:

23 Q. Take a look at page 8. Bottom of the
24 left-hand column. It starts four lines up -- five
25 lines. "The group of all sites with chemical oxidation

RD174

¶ 1 had statistically significantly higher benzene source
2 attenuation rates by 20 percent compared with sites
3 without chemical oxidation."

4 Does it sound to you based on that fragment of
5 the sentence -- I haven't finished reading it -- that
6 chemical oxidation was effective in reducing benzene in
7 source areas?

8 A. It appears at least statistically in the
9 population that's being considered that the benzene
10 reductions were 20 percent higher with oxidation
11 technology, chemical oxidation.

12 Q. But it goes on to state: "But the difference
13 in MTBE E [] source attenuation rates was not
14 statistically significant for these chemical oxidation
15 sites." Do you see that?

16 A. I see it.

17 Q. Now, do you know of any published report that
18 has more data on more sites than this one on attempts
19 to remediate MTBE? This one covers 3,491 sites.

20 A. I'm not aware of a report that includes more
Page 147



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21 sites with respect to the database that is being looked
22 at.

23 Q. So does this data set support the claim that
24 chemical oxidation is effective in remediating MTBE or
25 suggest that it's less effective than desired?

RD175

¶ 1 A. I don't think it says either. I think it says
2 that it was not statistically significant when compared
3 to other technologies.

4 Q. Well, don't you want to see a difference
5 between gee, we used chemical oxidation and this is the
6 improvement in the concentrations we got at the site
7 and we can even measure it statistically versus we
8 can't see a deference?

9 MR. CORRELL: Objection. Vague.
10 Argumentative.

11 THE DEPONENT: I think you'd have to dive
12 deeper into this site and the data and the comparison
13 of different technologies against each other, and they
14 didn't do that, at least not that I can tell, in a
15 detailed way looking at the actual mitigation methods.

16 BY MR. MILLER:

17 Q. You know what? I want to agree with you right
18 now because I've been asking for that data for over a
19 month so I can dive into it, but he won't give it to
20 me. Has he given it to you?

21 A. No.

22 Q. Certainly there's no ringing endorsement of
23 chemical oxidation as a strategy for dealing with MTBE
24 in this paper; correct?

25 MR. CORRELL: Objection. Misstate the paper.
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EXHIBIT K

1 **LONG-TERM BEHAVIOR OF MTBE PLUMES OF EXCEPTIONAL LENGTH**

2 James M. McDade¹, John A. Connor², Shawn M. Paquette², and Julia M. Small²

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6

7 **ABSTRACT**

8 In this study, for nine exceptionally long MTBE plumes that were identified in literature published
9 in the late 1990s and early 2000s, we have evaluated the change in plume lengths and
10 concentrations from that time to the present. These MTBE groundwater plume lengths were
11 reported to be between 600 to over 2400 meters, while the BTEX plumes at these sites were
12 generally reported to be less than 500 meters in length. Previous studies involving large
13 datasets of MTBE plumes show that the past lengths of these nine plumes exceed the length of
14 99% of the MTBE plumes across the nation. However, more recent data for the 9 sites show
15 that each of the MTBE plumes have decreased significantly in length, with 5 of 9 plumes
16 showing decreases of 75% or more compared to their historical maximum lengths.
17 Furthermore, MTBE concentrations within these plumes have decreased by 93% to 100%, with
18 2 of 9 sites showing significant decreases (98% and 99%) such that the regulatory agency has
19 subsequently closed the sites. The common factors contributing to the initial exceptional
20 lengths of these plumes were found to be: i) spills of large volumes of gasoline; ii) exceptionally
21 fast-moving, near-surface groundwater; iii) multiple sites or spills contributing to a single plume,
22 and iv) in several cases, low-oxygen groundwater conditions. The results of this study confirm
23 that MTBE plumes, like BTEX plumes, diminish significantly over time due to natural attenuation
24 and remediation.]

EXHIBIT L

Use of Long-Term Monitoring Data to Evaluate Benzene, MTBE, and TBA Plume Behavior in Groundwater at Retail Gasoline Sites

R. Kamath¹; J. A. Connor²; T. E. McHugh³; A. Nemir⁴; M. P. Le⁵; and A. J. Ryan⁶

Abstract: Long-term groundwater monitoring data for 48 retail gasoline sites were analyzed to define the characteristics of affected groundwater plumes containing benzene, methyl tert-butyl ether (MTBE), and tert-butyl alcohol (TBA). Results of this analysis were used to determine the observed range and statistical distribution of current plume lengths, plume stability conditions, constituent concentration trends and attenuation rates, and the remediation timeframe for this population of sites. The goal of this evaluation was to characterize plume behavior as observed across a variety of hydrogeologic settings, on the basis of detailed groundwater monitoring records, rather than to define the site-specific factors controlling plume behavior. The results indicate that MTBE plumes in groundwater underlying a majority of these underground storage tank sites that were monitored for five years or longer (1) have significantly diminished in concentration over time, (2) are comparable in length to benzene plumes, (3) are, like benzene plumes, principally stable or shrinking in size and concentration, and (4) are on track to achieve remedial goals within a timeframe comparable to or faster than that of benzene plumes. At these same sites, TBA plumes were found to be comparable to benzene and MTBE plumes in terms of plume length. However, whereas most TBA plumes are also stable or shrinking, the percentage of TBA plumes that are currently stable or shrinking (68%) is less than that for benzene plumes (95%) or MTBE plumes (90%), likely reflecting the temporary build-up of TBA concentrations in groundwater attributable to methyl tert-butyl ether (MTBE) biodegradation. Nevertheless, overall trends for TBA concentrations in groundwater indicate that TBA is attenuating at rates comparable to benzene and MTBE and can be expected to meet applicable remediation goals in a similar timeframe as the other gasoline constituents. DOI: 10.1061/(ASCE)EE.1943-7870.0000488. © 2012 American Society of Civil Engineers.

CE Database subject headings: Groundwater pollution; Benzene; Plumes; Remediation; Gasoline.

Author keywords: MTBE; Benzene; TBA; Reformulated gasoline; RFG; UST; Groundwater plume behavior; Plume length; Attenuation rate; decay rate; Remediation timeframe; Plume stability.

Introduction

In the 1990s, detections of methyl tert-butyl ether (MTBE) in the groundwater at petroleum storage tank sites and water supply wells generated considerable scientific and regulatory concern regarding the potential effect of this relatively new gasoline fuel additive on groundwater resources [USGS 1995; California Environmental Protection Agency (CEPA) 1999; USGS 2001]. In contrast to non-oxygenated gasoline fuel constituents, MTBE was known to be highly soluble in water, with low sorption coefficients, and was understood to be relatively recalcitrant to natural biological activity (Yeh and Novak 1991; Sufflita and Mormile 1993; Hubbard et al. 1994; Mormile et al. 1994; Neilson 1994). As a result, some scientists predicted that, in comparison with non-MTBE gasoline, releases of MTBE-containing gasoline from underground storage

tank (UST) sites would result in relatively long plumes of affected groundwater that would cause much longer-term effects on groundwater resources and drinking water supplies (Fogg et al. 1998; Odencrantz 1998; Weaver and Small 2002). These predictions were supported by the discovery of a few exceptionally long MTBE plumes extending thousands of feet down-gradient of the release point, such as in Long Island, New York (Weaver et al. 1996; Weaver et al. 1999).

However, studies evaluating actual field measurements of hundreds of MTBE plumes across the United States and abroad have found the true extent and duration of MTBE effects on groundwater to be much less than previously anticipated. Specifically, monitoring data for groundwater plumes at nearly 400 gasoline release sites in California (Happel et al. 1998; Shih et al. 2004), Texas (Mace and Choi 1998; Shorr and Rifai 2002; Rifai et al. 2003), South Carolina (Wilson et al. 2003), and Florida (Reid et al. 1999; Reisinger et al. 2000) show that MTBE plumes typically stabilize at relatively short lengths (< 200 ft), which are comparable to those of benzene plumes. Additionally, groundwater monitoring results from a total of 81 sites evaluated in Texas in 2002 (Shorr and Rifai 2002) and in Florida in 1999 (Reid et al. 1999) indicate that the majority of MTBE plumes (75%) are stable or decreasing in length. Furthermore, with regard to MTBE concentrations in individual monitoring wells, data from a total of 1628 monitoring wells in Texas (Rifai et al. 2003) and Connecticut (Stevens et al. 2006) indicate that MTBE concentrations in the groundwater are stable or decreasing over time in 74% of the wells evaluated. Research outside of the United States similarly reported the effects of MTBE

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Note. This manuscript was submitted on November 15, 2010; approved on September 7, 2011; published online on November 4, 2011. Discussion period open until September 1, 2012; separate discussions must be submitted for individual papers. This paper is part of the *Journal of Environmental Engineering*, Vol. 138, No. 4, April 1, 2012. ©ASCE, ISSN 0733-9372/2012/4-458-469/\$25.00.

plumes (2 of 42 sites) and MTBE plumes (2 of 41 sites) were observed to be expanding in size over time. MTBE plumes showed evidence of being detached from the original release area at a small number of sites (2 of 41 sites); however, comparison of the past and current dimensions of these detached MTBE plumes shows that the spatial extent of on-site and off-site groundwater impacts for these detached plumes is also diminishing in size. None of the 42 benzene plumes exhibited detached conditions.

For TBA, 68% of the plumes evaluated (23 of 34 sites) are currently stable or shrinking in size, whereas 26% (9 of 34 sites) were observed to be expanding in size over time. At the remaining two sites (6%), TBA was detected at higher concentrations in the plume wells than in the source wells, indicating a detached plume condition. The higher percentage of expanding TBA plumes (26%) compared with that of its parent compound MTBE (approx. 5%) suggests that, at some sites, biodegradation of MTBE has contributed to increased concentrations of TBA in the areas downgradient of the plume source area.

In summary, in terms of plume stability, MTBE plumes closely match the behavior of benzene plumes, with the vast majority of the MTBE plumes investigated (> 90%) being in a stable or diminishing condition. Additionally, preliminary evaluation of the MTBE footprint at the few sites with detached plumes shows that on-site and off-site groundwater impacts are now much smaller in size than in the past, thus suggesting that, similar to normal groundwater plumes, detached plumes also stabilize and attenuate over time and distance. Although a majority of the observed TBA plumes are also stable or diminishing (68%), the lower percentage relative to MTBE and benzene plumes likely reflects the temporary build-up of TBA concentrations in groundwater attributable to MTBE biodegradation. In general, TBA may persist within the portion of the plume where biodegradation of benzene, MTBE, and other gasoline constituents has depleted available electron acceptors, and then preferentially biodegrade in the downgradient portions of the plume, where higher concentrations of suitable electron acceptors are encountered.

Current Measured and Estimated Plume Lengths

For the purpose of this evaluation, plumes lengths were (1) measured directly for well-delineated plumes, (2) estimated using a conservative empirical relationship, or (3) characterized as

indeterminate on the basis of available data (see the discussion in the Methodology section above). Results of the plume length evaluation for each category of plume are provided below and in Fig. 3.

- (1) Measured plume lengths for well-delineated plumes: For sites with well-delineated plumes, the current median plume lengths, as measured by the monitoring well network, are 105 feet for benzene (26 sites), 75 feet for MTBE (28 sites), and 118 feet for TBA (19 sites) [see Fig. 3(a)]. The 90th percentile plume lengths for benzene, MTBE, and TBA at these same sites were 208 ft, 210 ft, and 226 ft, respectively. As a population, no statistically significant difference existed between MTBE plume lengths and benzene plume lengths at the same sites, as determined using the Student's t-test ($p = 0.69$). The two MTBE plumes found to be detached from the source area exhibited plume lengths of 550 ft (with a maximum down-gradient extent 700 ft from the original source zone) and 510 ft (with a maximum down-gradient extent 885 ft from the original source zone).
- (2) Estimated plume lengths: For sites with stable or shrinking plumes at which the existing well network was not adequate to delineate the plume length but for which a bulk attenuation rate could be calculated (on the basis of a $\ln C$ versus distance plot), plume lengths were estimated using the method described in Newell et al. (2002) (see the discussion in the Methodology section above). For this population of sites, the current median estimated plume lengths are 354 feet for benzene (eight sites), 379 feet for MTBE (seven sites), and 371 feet for TBA (three sites) [see Fig. 3(b)].
- (3) Measured and estimated plume lengths: In combination, the current median plume lengths were measured or were estimated to be 125 feet for benzene (34 of 42 sites), 110 feet for MTBE (35 of 41 sites), and 145 feet for TBA (22 of 34 sites) [see Fig. 3(c)]. For this data set, the 90th percentile plume lengths for benzene, MTBE, and TBA are 356 ft, 454 ft, and 366 ft, respectively [see Fig. 3(b)].
- (4) Measured, estimated and indeterminate plume lengths: The plume length values presented above do not include indeterminate plumes, for which the plume lengths could not be measured or estimated on the basis of available data, corresponding to 19% of the benzene plumes (8 of 42), 15% of

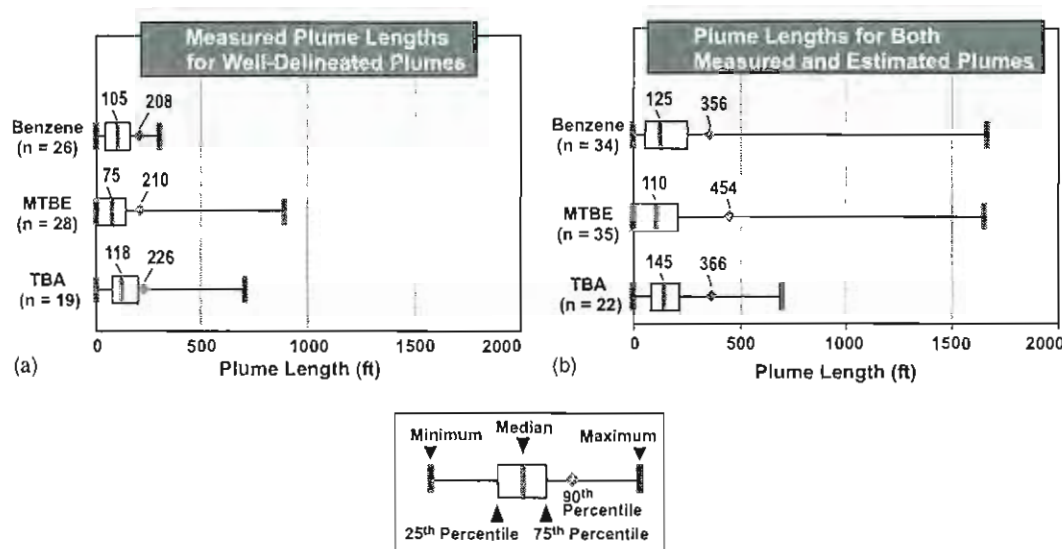


Fig. 3. Distribution of (a) measured plume lengths for well-delineated plumes; (b) measured and estimated plume lengths for all plumes

Table 2. MTBE Plume Characteristics Reported in the Current Study versus that Reported in Literature

MTBE plume characteristic	Results for MTBE plumes					Comments
	Current study		Prior studies of data for multiple plumes			
	No. of sites	Value	No. of sites	Value	Reference	
Percent of stable or shrinking plume	41	90%	81	50% to 96%	(Shorr and Rifai 2002; Reid et al. 1999)	Results fit within the range of previous findings, but indicate higher % of stable/shrinking plumes.
Plume length (feet)	35	Median = 140 ft ^a	356	Median = 140–178 ft	(Mace and Choi 1998; Wilson et al. 2003; Reid et al. 1999)	The study finds median MTBE plume length to be at lower end of range in prior studies.
Point attenuation rate (per year)	33	−3.6 to 0.29 (Median = −0.63)	100 ^b	−1.2 to −0.15 (Median = −0.35)	(Schinner et al. 1999; Wilson and Kolhatkar 2002; Hansen et al. 2003; EPA 2005; Rifai et al. 2003)	The study finds MTBE attenuation rates to be faster than previous studies.

^aTable shows the adjusted median plume length for sites at which plume lengths were either measured, estimated, or considered indeterminate.

^bResults reported from MNA-only sites.

In addition, given the discontinued use of MTBE as a fuel additive, additional releases of MTBE can no longer occur at active UST sites; therefore, in the absence of such additional source contributions, faster attenuation rates are likely to be observed within the population of existing MTBE plumes (Stevens 2006). Furthermore, the higher solubility of MTBE compared with benzene may contribute to more rapid dissolution and depletion of MTBE from the source, resulting in larger reductions in source contributions of MTBE to the plume over the long term.

Conclusions

This study addresses the characteristics of benzene, MTBE, and TBA plumes in groundwater for a population of 48 retail service station sites, specifically in terms of plume length, plume stability condition, concentration reduction trends over time, attenuation rates, and the timeframe within which natural attenuation achieved remedial goals for each constituent. The goal of this evaluation was to characterize plume behavior as observed across a variety of hydrogeologic settings on the basis of detailed groundwater monitoring records, rather than to define the site-specific factors controlling plume behavior. The groundwater monitoring data analyzed in this study confirm that, over the long term for this site population, the behavior of MTBE plumes in groundwater is similar to that of benzene plumes with respect to current plume lengths and plume stability trends. However, overall MTBE concentrations are decreasing more quickly than benzene, and may, on average, reach the applicable remediation goals more quickly than benzene plumes. The faster attenuation of MTBE plumes compared with benzene is consistent with the discontinued use of MTBE as a fuel additive.

TBA plumes were also found to be comparable to benzene and MTBE plumes in terms of plume length. However, whereas most TBA plumes are stable or shrinking, the percentage of TBA plumes currently stable or shrinking (68%) is less than that for benzene plumes (95%) and MTBE plumes (90%), likely reflecting the temporary build-up of TBA concentrations in groundwater attributable to MTBE biodegradation. Nevertheless, overall trends for the median and maximum concentrations of TBA in groundwater at these sites indicate that TBA is attenuating at rates somewhat faster

than benzene and can therefore be expected diminish to applicable remediation goals in a similar timeframe as the other gasoline constituents.

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EXHIBIT M



**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

**IN RE: METHYL TERTIARY BUTYL
ETHER ("MTBE") PRODUCTS
M21-88
LIABILITY LITIGATION**

**Master File No. 1:00-1898
MDL 1358 (SAS)**

This document relates to:

Commonwealth of Puerto Rico, et al.
v.
Shell Oil Co., et al.,
Case No. 07-CIV-10470 (SAS)

**PLAINTIFFS THE COMMONWEALTH OF PUERTO RICO'S AND THE
COMMONWEALTH OF PUERTO RICO THROUGH THE ENVIRONMENTAL
QUALITY CONTROL BOARD'S SECOND AMENDED NOTICE OF DEPOSITION OF
JOHN A. CONNOR, WITH REQUESTS FOR PRODUCTION OF DOCUMENTS AND
VIDEOTAPING**

TO ALL PARTIES AND THEIR ATTORNEY(S) OF RECORD:

PLEASE TAKE NOTICE that, pursuant to Rules 26, 30, and 34 of the Federal Rules of Civil Procedure, Plaintiffs the Commonwealth of Puerto Rico and the Commonwealth of Puerto Rico Through the Environmental Quality Control Board ("Plaintiffs") will take the oral deposition of Defendants' expert John A. Connor on **July 2, 2014**, beginning at 10:00 a.m., at the offices of Glynn & Finley, LLP, One Walnut Creek Center, 100 Pringle Avenue, Suite 500, Walnut Creek, California 94596.

The deposition will be recorded stenographically and on videotape, and may be used as evidence at trial. The stenographic recording will be taken before a notary public authorized to administer oaths and who is present at the specified time and place, and by videotape.

DEFINITIONS

1. The definitions set forth in Local Civil Rule 26.3, Local Rules of the United States District Courts for the Southern and Eastern Districts of New York, are incorporated herein as though fully set forth herein.
2. "YOU" and "YOUR" refers to the deponent and the representing defendant or defendants.
3. The terms "DOCUMENT" or "DOCUMENTS" is defined to be synonymous in meaning and equal in scope to the usage of this term in Federal Rule of Civil Procedure 34(a), including, without limitation, all manner of electronic, written, typed, printed, reproduced, filmed or recorded material, and all photographs, pictures, plans, drawings, or other representations of any kind of and includes, without limitation,
 - (a) papers, books, journals, handbooks, manuals, ledgers, statements, memoranda, reports, invoices, worksheets, work papers, notes, transcription of notes, letters, correspondence, abstracts, diagrams, plans, blueprints, specifications, pictures, drawings, films, photographs, graphic representations, diaries, calendars, desk calendars, lists, logs, publications, advertisements, instructions, minutes, orders, messages, résumés, summaries, agreements, contracts, telegrams, telexes, cables, recordings, electronic mail, audio tapes, transcriptions of tapes or recordings, or any other writings or tangible things in which any forms of communication are recorded or reproduced, as well as all notations on the foregoing; and
 - (b) original and all other copies not absolutely identical; and

4. "MTBE" means Methyl Tertiary Butyl Ether.

INSTRUCTIONS

1. Pursuant to Honorable Shira A. Scheindlin's Suggested Rules of Discovery Practice No. 7, governing Document Production at Depositions, defendants and/or the deponent must produce documents described in the section of this notice entitled "Requests for Production of Documents" no later than ten (10) days prior to the deposition.

2. No document request in this notice is intended to call for the production of documents protected from disclosure under Case Management Order #73.

3. The production shall be made to special counsel, Berger and Montague, 1622 Locust Street, Philadelphia, PA 19103. The production should be made so that the documents are available to plaintiff ten (10) days prior to the deposition.

4. All electronic files, including databases, compilations, spreadsheets, and other electronic files and formats are to be produce in their native format.

5. All documents productions should be made in compliance with the deponent's and defendants' obligations pursuant to Federal Rules of Civil Procedure Rule 34 and Rule 26.

DOCUMENT REQUESTS

DOCUMENT REQUEST NO. 1:

The deponent's complete file(s) which refer or relate to this lawsuit.

DOCUMENT REQUEST NO. 2:

The deponent's current resume, statements of personal qualifications, and curricula vitae, including all lists of publications.

DOCUMENT REQUEST NO. 22:

All MODELING journals (log of MODEL runs) regarding construction, calibration, sensitivity analysis, parameter optimization, validation and scenario/hypothesis testing.

DOCUMENT REQUEST NO. 23

Copies of all hand written calculations and notes generated in support of any opinions, including, but not limited to, any statistical and MODELING analysis.

DOCUMENT REQUEST NO. 24:

All paper and electronic correspondence between deponent and any staff, consultant, student or other third party concerning the subjects of the deponent's anticipated testimony in this lawsuit.

DOCUMENT REQUEST NO. 24:

All documents which identify the sites described in the article described as: Kamath, R., J.A. Connor, T.E. McHugh, A. Nemir, M.P. Le, A. J. Ryan 2011. Use of long-term monitoring data to evaluate benzene, MTBE and TBA plume behavior in groundwater at retail gasoline sites. *Journal of Environmental Engineering*. DOI: 10.1061/(ASCE)EE.1943-7870.0000488, and all documents which were considered and used in evaluating plume length and behavior in groundwater at sites which were mentioned, or referred to in that article.

DOCUMENT REQUEST NO. 25:

All documents received from, or sent to any member of the API Soil and Groundwater Technical Group which mentions, concerns, or refers to the study described in the following article: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

DOCUMENT REQUEST NO. 26:

All documents received from, or sent to the American Petroleum Institute concerning the funding, or any other aspect of the study described in the article known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg, including any proposal YOU sent to API concerning the study.

DOCUMENT REQUEST NO. 27:

All documents received from, or sent to Sanjay Garg and/or Shell Global Solutions (US), Inc. which mentions, concerns, or concerns the study or published article known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

DOCUMENT REQUEST NO. 28:

A copy of any report(s) (including drafts) YOU submitted to the American Petroleum Institute and/or the API Soil and Groundwater Technical Group, or its members for review and/or comments concerning the study known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg, including any documents which mention, concern, comment on, review and/or propose changes to that report(s).

DOCUMENT REQUEST NO. 29:

A copy of any pre-publication version of the article known as Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

DOCUMENT REQUEST NO. 30:

Any and all documents and letters received from each and every editor and/or reviewer(s) of any pre-publication version of the article mentioned in Request No. 29, including all comments and/or suggested changes/modifications to the article.

DOCUMENT REQUEST NO. 31:

To the extent not already covered by the above requests, all DOCUMENTS required to be disclosed by Rule 26(a)(2) of the Federal Rules of Civil Procedure, including, but not limited to, all data and other information considered, reviewed, relied on, and/or used by the deponent in forming his opinions in the above-captioned case; any exhibit to be used as a summary of or support for the deponent's opinions in the above captioned case; all DOCUMENTS CONCERNING compensation paid or to be paid to the deponent in connection with his opinions and work in the above-captioned case, including, but not limited to, billing records, invoices, and retainer agreements, and compensation paid to the witness by Chevron in the past seven (7) years; and all DOCUMENTS CONCERNING any other MTBE cases in which the deponent has testified as an expert at trial or by deposition, including, but not limited to, affidavits and/or expert reports submitted by the deponent or on the deponent's behalf, and deposition, trial, and/or hearing transcripts.

Dated: May 7, 2014

MILLER & AXLINE
A Professional Corporation

By: 

DUANE C. MILLER
Attorneys for Plaintiffs

EXHIBIT N



**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

**IN RE: METHYL TERTIARY BUTYL
ETHER ("MTBE") PRODUCTS
M21-88
LIABILITY LITIGATION**

**Master File No. 1:00-1898
MDL 1358 (SAS)**

This document relates to:

***Commonwealth of Puerto Rico, et al.*
v.
Shell Oil Co., et al.,
*Case No. 07-CIV-10470 (SAS)***

**PLAINTIFFS THE COMMONWEALTH OF PUERTO RICO'S AND THE
COMMONWEALTH OF PUERTO RICO THROUGH THE ENVIRONMENTAL
QUALITY CONTROL BOARD'S SECOND AMENDED NOTICE OF DEPOSITION OF
ANTHONY DAUS, WITH REQUESTS FOR PRODUCTION OF DOCUMENTS AND
VIDEOTAPING.**

TO ALL PARTIES AND THEIR ATTORNEY(S) OF RECORD:

PLEASE TAKE NOTICE that, pursuant to Rules 26, 30, and 34 of the Federal Rules of Civil Procedure, Plaintiffs the Commonwealth of Puerto Rico and the Commonwealth of Puerto Rico Through the Environmental Quality Control Board ("Plaintiffs") will take the oral deposition of Defendants' expert Anthony Daus **June 12, 2014**, beginning at 10:00 a.m., at the law offices of Miller & Axline, 1050 Fulton Avenue, Suite 100, Sacramento, California 95825.

The deposition will be recorded stenographically and on videotape, and may be used as evidence at trial. The stenographic recording will be taken before a notary public authorized to administer oaths and who is present at the specified time and place, and by videotape.

INSTRUCTIONS

1. Pursuant to Honorable Shira A. Scheindlin's Suggested Rules of Discovery Practice No. 7, governing Document Production at Depositions, defendants and/or the deponent must produce documents described in the section of this notice entitled "Requests for Production of Documents" no later than ten (10) days prior to the deposition.
2. No document request in this notice is intended to call for the production of documents protected from disclosure under Case Management Order #73.
3. The production shall be made to special counsel, Berger and Montague, 1622 Locust Street, Philadelphia, PA 19103. The production should be made so that the documents are available to plaintiff ten (10) days prior to the deposition.
4. All electronic files, including databases, compilations, spreadsheets, and other electronic files and formats are to be produce in their native format.
5. All documents productions should be made in compliance with the deponent's and defendants' obligations pursuant to Federal Rules of Civil Procedure Rule 34 and Rule 26.

DOCUMENT REQUESTS

DOCUMENT REQUEST NO. 1:

The deponent's complete file(s) which refer or relate to this lawsuit.

DOCUMENT REQUEST NO. 2:

The deponent's current resume, statements of personal qualifications, and curricula vitae, including all lists of publications.

DOCUMENT REQUEST NO. 22:

All MODELING journals (log of MODEL runs) regarding construction, calibration, sensitivity analysis, parameter optimization, validation and scenario/hypothesis testing.

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Copies of all hand written calculations and notes generated in support of any opinions, including, but not limited to, any statistical and MODELING analysis.

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All documents which identify the sites described in the article described as: Kamath, R., J.A. Connor, T.E. McHugh, A. Nemir, M.P. Le, A. J. Ryan 2011. Use of long-term monitoring data to evaluate benzene, MTBE and TBA plume behavior in groundwater at retail gasoline sites. *Journal of Environmental Engineering*. DOI: 10.1061/(ASCE)EE.1943-7870.0000488, and all documents which were considered and used in evaluating plume length and behavior in groundwater at sites which were mentioned, or referred to in that article.

DOCUMENT REQUEST NO. 25:

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DOCUMENT REQUEST NO. 27:

All documents received from, or sent to Sanjay Garg and/or Shell Global Solutions (US), Inc. which mentions, concerns, or concerns the study or published article known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

DOCUMENT REQUEST NO. 28:

A copy of any report(s) (including drafts) YOU submitted to the American Petroleum Institute and/or the API Soil and Groundwater Technical Group, or its members for review and/or comments concerning the study known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg, including any documents which mention, concern, comment on, review and/or propose changes to that report(s).

DOCUMENT REQUEST NO. 29:

A copy of any pre-publication version of the article known as Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

DOCUMENT REQUEST NO. 30:

Any and all documents and letters received from each and every editor and/or reviewer(s) of any pre-publication version of the article mentioned in Request No. 29, including all comments and/or suggested changes/modifications to the article.

DOCUMENT REQUEST NO. 31:

To the extent not already covered by the above requests, all DOCUMENTS required to be disclosed by Rule 26(a)(2) of the Federal Rules of Civil Procedure, including, but not limited to, all data and other information considered, reviewed, relied on, and/or used by the deponent in forming his opinions in the above-captioned case; any exhibit to be used as a summary of or support for the deponent's opinions in the above captioned case; all DOCUMENTS CONCERNING compensation paid or to be paid to the deponent in connection with his opinions and work in the above-captioned case, including, but not limited to, billing records, invoices, and retainer agreements, and compensation paid to the witness by Chevron in the past seven (7) years; and all DOCUMENTS CONCERNING any other MTBE cases in which the deponent has testified as an expert at trial or by deposition, including, but not limited to, affidavits and/or expert reports submitted by the deponent or on the deponent's behalf, and deposition, trial, and/or hearing transcripts.

Dated: May 13, 2014

MILLER & AXLINE
A Professional Corporation

By: 

DUANE C. MILLER
Attorneys for Plaintiffs

EXHIBIT O



**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

**IN RE: METHYL TERTIARY BUTYL
ETHER ("MTBE") PRODUCTS**

LIABILITY LITIGATION

This document relates to:

Commonwealth of Puerto Rico, et al.

v.

Shell Oil Co., et al.,

Cause No. 07-CIV-10470 (SAS)

**Master File No. 1:00-1898
MDL 1358 (SAS): No. M21-88**

**DEFENDANTS' RESPONSE TO PLAINTIFFS' REQUESTS FOR PRODUCTION
CONTAINED IN THE NOTICE OF DEPOSITION OF ANTHONY DAUS**

Defendants Chevron Corporation, Chevron U.S.A. Inc., Chevron Puerto Rico, LLC (formerly Texaco Puerto Rico Inc., now PC Puerto Rico LLC), Chevron Estrella Puerto Rico Inc., Chevron Caribbean Inc., and Chevron International Oil Company, Inc. (collectively, "Defendants"), submit the following responses and objections to Plaintiffs' Requests for Production contained in the Deposition Notice of Mr. Anthony Daus (the "Requests").

PRELIMINARY STATEMENT

Chevron Corporation, Chevron U.S.A. Inc., Chevron International Oil Company Inc., Chevron Caribbean Inc. and Chevron Estrella Puerto Rico Inc. did not market or sell gasoline in Puerto Rico during the relevant time period. Chevron Corporation, Chevron U.S.A. Inc., Chevron International Oil Company Inc., Chevron Caribbean Inc., Chevron Puerto Rico, LLC and Chevron Estrella Puerto Rico Inc. did not own or operate a gasoline refinery in Puerto Rico during the relevant time period. Chevron Corporation, Chevron U.S.A. Inc., Chevron International Oil Company Inc., Chevron Caribbean Inc., Chevron Puerto Rico, LLC and Chevron Estrella Puerto Rico Inc. did not manufacture gasoline or gasoline products in Puerto

Rico during the relevant time period. Chevron Corporation, Chevron U.S.A. Inc., Chevron International Oil Company Inc., Chevron Caribbean Inc., Chevron Puerto Rico, LLC and Chevron Estrella Puerto Rico Inc. did not manufacture, purchase, receive, distribute or sell neat MTBE in Puerto Rico during the relevant time period. Chevron Corporation, Chevron U.S.A. Inc., Chevron International Oil Company Inc., Chevron Caribbean Inc., Chevron Puerto Rico, LLC and Chevron Estrella Puerto Rico Inc. did not purchase, receive, distribute or sell reformulated gasoline in Puerto Rico during the relevant time period.

GENERAL OBJECTIONS

1. Defendants object to the instructions and definitions set forth in Plaintiffs' Requests to the extent they deviate from or purport to impose requirements other than or in addition to those required by the Federal Rules of Civil Procedure, the Local Civil Rules for the Southern District of New York and the Case Management Orders entered in this case. The definitions provided in Local Civil Rule 26.3 are automatically incorporated into all discovery requests and "[n]o discovery request shall use broader definitions or rules of construction."

2. Defendants object to Plaintiffs' Requests to the extent they seek information or documents outside the restricted scope of discovery permissible under the Federal Rules of Civil Procedure, the Local Civil Rules for the Southern District of New York and the Case Management Orders entered in this case.

3. Defendants object to Plaintiffs' Requests to the extent they purport to call for the production and/or disclosure of privileged documents, materials, or matters, including but not limited to those protected by the attorney client privilege, the work-product doctrine, the joint-defense privilege, the self-evaluative privilege, and/or the privilege accorded to settlement materials. Defendants provide these responses on the condition that the inadvertent production

of information or documents covered by such privilege, rule, or doctrine does not waive any of their rights to assert such privilege, rule, or doctrine and that they may withdraw or recover any such information or documents inadvertently produced as soon as identified.

4. Defendants object to Plaintiffs' Requests to the extent they seek information or documents relating to events that occurred prior to or after the period during which Defendants may have sold gasoline containing MTBE on the grounds that those Requests are overbroad, unduly burdensome and oppressive, and on the further grounds that they seek information not relevant to the subject matter of this case and not reasonably calculated to lead to the discovery of admissible evidence.

5. Defendants object to Plaintiffs' Requests to the extent they request information or documents beyond the limitations and parameters agreed among the parties or imposed by the Court and/or Special Master. Defendants' responses are subject to all such limitations and parameters and incorporate by reference the discovery parameters imposed by the Court and/or Special Master.

6. Defendants object to Plaintiffs' Requests to the extent they seek trade secrets and/or confidential, sensitive, or proprietary information. Defendants make these responses on the condition that the inadvertent production of information or documents that disclose trade secrets and/or confidential, sensitive, or proprietary information does not waive Defendants' right to protect such trade secrets and/or confidential, sensitive, or proprietary information and that Defendants may withdraw or recover any such information or documents inadvertently produced as soon as identified.

7. No disclosure by Defendants of any information shall constitute a waiver of any objections.

8. The information Defendants provide in response to these Requests, if any, is provided solely for the purpose of this action. Such information is subject to all objections regarding relevance, authenticity, materiality, propriety and admissibility and any other objections that would require exclusion of the information, if such information were offered as evidence at trial, all of which objections are hereby expressly reserved and may be interposed at the time of trial.

9. Defendants' responses are based on information available as a result of a good faith search in the time allowed before submitting the responses. Defendants reserve the right to supplement or modify these responses as appropriate in the event additional information becomes available.

10. All responses are subject to appropriate confidentiality agreements negotiated, or to be negotiated, between the parties, or as may be imposed by the Court.

SPECIFIC RESPONSES AND OBJECTIONS

REQUEST FOR PRODUCTION NO. 1:

The deponent's complete file(s) which refer or relate to this lawsuit.

RESPONSE TO REQUEST FOR PRODUCTION NO. 1:

Defendants incorporate herein their Preliminary Statement and General Objections. Defendants also incorporate Case Management Order No. 112, dated November 13, 2013 (CMO #112), which states that the Reliance Materials of a testifying expert include "all files, documents, texts and underlying data or manipulations of such data reviewed or relied upon by that expert in forming the basis for his or her opinion, including all computer software programs, models, computer simulations on which the expert's opinions are based, and work papers." CMO #112 further states that "[a]ny additional reliance materials generated or first reviewed and relied upon by the expert subsequent to the initial production of reliance materials but prior to

RESPONSE TO REQUEST FOR PRODUCTION NO. 23:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request to the extent that it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

Subject to and without waiving the foregoing, Defendants have produced Mr. Daus's Reliance Materials and will produce any additional Reliance Materials in accordance with CMO #112. Defendants will produce these documents in accordance with the provisions of Rule 30(b)(2) and Rule 34(b)(2)(A) of the Federal Rules of Civil Procedure.

REQUEST FOR PRODUCTION NO. 24:

All paper and electronic correspondence between deponent and any staff, consultant, student or other third party concerning the subjects of the deponent's anticipated testimony in this lawsuit.

RESPONSE TO REQUEST FOR PRODUCTION NO. 24:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request to the extent that it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

Subject to and without waiving the foregoing, Defendants have produced Mr. Daus's Reliance Materials and will produce any additional Reliance Materials in accordance with CMO #112. Defendants will produce these documents in accordance with the provisions of Rule 30(b)(2) and Rule 34(b)(2)(A) of the Federal Rules of Civil Procedure.

REQUEST FOR PRODUCTION NO. 24 (sic):

All documents which identify the sites described in the article described as: Kamath, R., J.A. Connor, T.E. McHugh, A. Nemir, M.P. Le, A. J. Ryan 2011. Use of long-term monitoring data to evaluate benzene, MTBE and TBA plume behavior in groundwater at retail gasoline sites. Journal of Environmental Engineering. DOI: 10.1061/(ASCE) EE.1943-7870.0000488, and all documents which were considered and used in evaluating plume length and behavior in groundwater at sites which were mentioned, or referred to in that article.

RESPONSE TO REQUEST FOR PRODUCTION NO. 24:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 25:

All documents received from, or sent to any member of the API Soil and Groundwater Technical Group which mentions, concerns, or refers to the study described in the following article: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

RESPONSE TO REQUEST FOR PRODUCTION NO. 25:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 26:

All documents received from, or sent to the American Petroleum Institute concerning the funding, or any other aspect of the study described in the article known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg, including any proposal YOU sent to API concerning the study.

RESPONSE TO REQUEST FOR PRODUCTION NO. 26:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 27:

All documents received from, or sent to Sanjay Garg and/or Shell Global Solutions (US), Inc. which mentions, concerns, or concerns the study or published article known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

RESPONSE TO REQUEST FOR PRODUCTION NO. 27:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 28:

A copy of any report(s) (including drafts) YOU submitted to the American Petroleum Institute and/or the API Soil and Groundwater Technical Group, or its members for review and/or comments concerning the study known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg, including any documents which mention, concern, comment on, review and/or propose changes to that report(s).

RESPONSE TO REQUEST FOR PRODUCTION NO. 28:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 29:

A copy of any pre-publication version of the article known as Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

RESPONSE TO REQUEST FOR PRODUCTION NO. 29:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 30:

Any and all documents and letters received from each and every editor and/or reviewer(s) of any pre-publication version of the article mentioned in Request No. 29, including all comments and/or suggested changes/modifications to the article.

RESPONSE TO REQUEST FOR PRODUCTION NO. 30:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 31:

To the extent not already covered by the above requests, all DOCUMENTS required to be disclosed by Rule 26(a)(2) of the Federal Rules of Civil Procedure, including, but not limited to, all data and other information considered, reviewed, relied on, and/or used by the deponent in forming his opinions in the above-captioned case; any exhibit to be used as a summary of or support for the deponent's opinions in the above captioned case; all DOCUMENTS CONCERNING compensation paid or to be paid to the deponent in connection with his opinions and work in the above-captioned case, including, but not limited to, billing records, invoices, and retainer agreements, and compensation paid to the witness by Chevron in the past seven (7) years; and all DOCUMENTS CONCERNING any other MTBE cases in which the deponent has testified as an expert at trial or by deposition, including, but not limited to, affidavits and/or expert reports submitted by the deponent or on the deponent's behalf, and deposition, trial, and/or hearing transcripts.

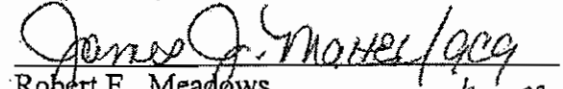
RESPONSE TO REQUEST FOR PRODUCTION NO. 31:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

Subject to and without waiving the foregoing, Defendants have produced Mr. Daus's Reliance Materials and will produce any additional Reliance Materials in accordance with CMO #112. Defendants will produce these documents in accordance with the provisions of Rule 30(b)(2) and Rule 34(b)(2)(A) of the Federal Rules of Civil Procedure.

Dated: June 6, 2014.

Respectfully submitted,



Robert E. Meadows
Jeremiah J. Anderson
James J. Maher

by permission

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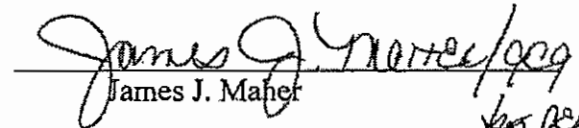
Charles C. Correll, Jr.
King & Spalding LLP
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Telephone: (415) 318-1200
Facsimile: (415) 318-1300

William F. Hughes
SEDGWICK LLP
2900 K Street, NW, Harbourside
Washington, D.C. 20007
Telephone: (202) 204-1000

**Attorneys for Defendants Chevron
Corporation, Chevron U.S.A. Inc.,
Chevron Puerto Rico, LLC, Chevron
Estrella Puerto Rico Inc., Chevron
Caribbean Inc. and Chevron
International Oil Company, Inc.**

Certificate of Service

I hereby certify that I have this 6 June of April, 2014, served by Lexis/Nexis File & Serve, a copy of the foregoing pleading on all parties of record.



James J. Maher

by permission

EXHIBIT P

Dave E. Blum

From: Correll, Charles [CCorrell@KSLAW.com]
Sent: Tuesday, June 24, 2014 5:41 AM
To: Kathy Herron; Maher, James
Cc: Duane Miller; Dave Blum; Tonga Garcia; Anderson, Jeremiah
Subject: RE: Commonwealth of Puerto Rico v. Shell Oil, et al.

Duane,

As I told you on Thursday, I am traveling through today. I received your email with very detailed questions Friday evening. I have forwarded it on and should have a response to you today, which I can discuss tomorrow.

Your motion has numerous inaccuracies. As just one example, you claim that there was a production due today, when we have produced and will produce all reliance material within the time frame set by CMO 112. In any event, I trust that you will correct these inaccuracies before filing. You may want to wait for our response email first, but if you don't, I also trust you will indicate in your motion that our response to your questions will be served today.

Charles

From: Kathy Herron [<mailto:kherron@toxictorts.org>]
Sent: Monday, June 23, 2014 5:06 PM
To: Correll, Charles; Maher, James
Cc: Duane Miller; Dave Blum; Tonga Garcia
Subject: Commonwealth of Puerto Rico v. Shell Oil, et al.

Dear Mr. Correll,

Please find attached a courtesy copy of a draft motion to compel production and to strike Mr. Connor as an expert witness.

Plaintiffs intend to file this motion tomorrow. Please call if you have any concerns or if you wish to discuss.

Dave Blum

by

Kathy Herron

Miller & Axline / phone (916) 488-6688 / fax (916) 488-4288 This private communication may be confidential or privileged. If you are not the intended recipient, any disclosure, distribution, or use of information herein or attached is prohibited.

King & Spalding Confidentiality Notice:

This message is being sent by or on behalf of a lawyer. It is intended exclusively for the individual or entity to which it is addressed. This communication may contain information that is proprietary, privileged or confidential or otherwise legally exempt from disclosure. If you are not the named addressee, you are not authorized to read, print, retain, copy or disseminate this message or any part of it. If you have received this message in error, please notify the sender immediately by e-mail and delete all copies of the message.

EXHIBIT Q



**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

**IN RE: METHYL TERTIARY BUTYL
ETHER ("MTBE") PRODUCTS**

LIABILITY LITIGATION

This document relates to:

Commonwealth of Puerto Rico, et al.

v.

Shell Oil Co., et al.,

Cause No. 07-CIV-10470 (SAS)

**Master File No. 1:00-1898
MDL 1358 (SAS): No. M21-88**

**DEFENDANTS' RESPONSE TO PLAINTIFFS' REQUESTS FOR PRODUCTION
CONTAINED IN THE NOTICE OF DEPOSITION OF JOHN CONNOR**

Defendants Chevron Corporation, Chevron U.S.A. Inc., Chevron Puerto Rico, LLC (formerly Texaco Puerto Rico Inc., now PC Puerto Rico LLC), Chevron Estrella Puerto Rico Inc., Chevron Caribbean Inc., and Chevron International Oil Company, Inc. (collectively, "Defendants"), submit the following responses and objections to Plaintiffs' Requests for Production contained in the Deposition Notice of Mr. John Connor (the "Requests").

PRELIMINARY STATEMENT

Chevron Corporation, Chevron U.S.A. Inc., Chevron International Oil Company Inc., Chevron Caribbean Inc. and Chevron Estrella Puerto Rico Inc. did not market or sell gasoline in Puerto Rico during the relevant time period. Chevron Corporation, Chevron U.S.A. Inc., Chevron International Oil Company Inc., Chevron Caribbean Inc., Chevron Puerto Rico, LLC and Chevron Estrella Puerto Rico Inc. did not own or operate a gasoline refinery in Puerto Rico during the relevant time period. Chevron Corporation, Chevron U.S.A. Inc., Chevron International Oil Company Inc., Chevron Caribbean Inc., Chevron Puerto Rico, LLC and Chevron Estrella Puerto Rico Inc. did not manufacture gasoline or gasoline products in Puerto

RESPONSE TO REQUEST FOR PRODUCTION NO. 23:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request to the extent that it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

Subject to and without waiving the foregoing, Defendants have produced Mr. Connor's Reliance Materials and will produce any additional Reliance Materials in accordance with CMO #112.

REQUEST FOR PRODUCTION NO. 24:

All paper and electronic correspondence between deponent and any staff, consultant, student or other third party concerning the subjects of the deponent's anticipated testimony in this lawsuit.

RESPONSE TO REQUEST FOR PRODUCTION NO. 24:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request to the extent that it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

Subject to and without waiving the foregoing, Defendants have produced Mr. Connor's Reliance Materials and will produce any additional Reliance Materials in accordance with CMO #112.

REQUEST FOR PRODUCTION NO. 24 (sic):

All documents which identify the sites described in the article described as: Kamath, R., J.A. Connor, T.E. McHugh, A. Nemir, M.P. Le, A. J. Ryan 2011. Use of long-term monitoring data to evaluate benzene, MTBE and TBA plume behavior in groundwater at retail gasoline sites. Journal of Environmental Engineering. DOI: 10.1061/(ASCE) EE.1943-7870.0000488, and all documents which were considered and used in evaluating plume length and behavior in groundwater at sites which were mentioned, or referred to in that article.

RESPONSE TO REQUEST FOR PRODUCTION NO. 24:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 25:

All documents received from, or sent to any member of the API Soil and Groundwater Technical Group which mentions, concerns, or refers to the study described in the following article: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

RESPONSE TO REQUEST FOR PRODUCTION NO. 25:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 26:

All documents received from, or sent to the American Petroleum Institute concerning the funding, or any other aspect of the study described in the article known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg, including any proposal YOU sent to API concerning the study.

RESPONSE TO REQUEST FOR PRODUCTION NO. 26:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 27:

All documents received from, or sent to Sanjay Garg and/or Shell Global Solutions (US), Inc. which mentions, concerns, or concerns the study or published article known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

RESPONSE TO REQUEST FOR PRODUCTION NO. 27:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 28:

A copy of any report(s) (including drafts) YOU submitted to the American Petroleum Institute and/or the API Soil and Groundwater Technical Group, or its members for review and/or comments concerning the study known as: Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg, including any documents which mention, concern, comment on, review and/or propose changes to that report(s).

RESPONSE TO REQUEST FOR PRODUCTION NO. 28:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 29:

A copy of any pre-publication version of the article known as Progress in Remediation of Groundwater at Petroleum Sites in California by Thomas E. McHugh, Poonam R. Kulkarni, Charles J. Newell, John A. Connor, and Sanjay Garg.

RESPONSE TO REQUEST FOR PRODUCTION NO. 29:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 30:

Any and all documents and letters received from each and every editor and/or reviewer(s) of any pre-publication version of the article mentioned in Request No. 29, including all comments and/or suggested changes/modifications to the article.

RESPONSE TO REQUEST FOR PRODUCTION NO. 30:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

REQUEST FOR PRODUCTION NO. 31:

To the extent not already covered by the above requests, all DOCUMENTS required to be disclosed by Rule 26(a)(2) of the Federal Rules of Civil Procedure, including, but not limited to, all data and other information considered, reviewed, relied on, and/or used by the deponent in forming his opinions in the above-captioned case; any exhibit to be used as a summary of or support for the deponent's opinions in the above captioned case; all DOCUMENTS CONCERNING compensation paid or to be paid to the deponent in connection with his opinions and work in the above-captioned case, including, but not limited to, billing records, invoices, and retainer agreements, and compensation paid to the witness by Chevron in the past seven (7) years; and all DOCUMENTS CONCERNING any other MTBE cases in which the deponent has testified as an expert at trial or by deposition, including, but not limited to, affidavits and/or expert reports submitted by the deponent or on the deponent's behalf, and deposition, trial, and/or hearing transcripts.

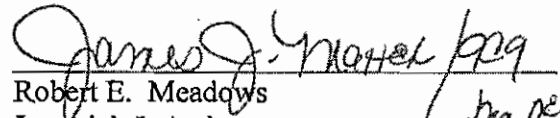
RESPONSE TO REQUEST FOR PRODUCTION NO. 31:

Defendants incorporate herein their Preliminary Statement, General Objections and CMO #112. Defendants object to the Request because it seeks documents other than Reliance Documents and documents described in Paragraph VII of CMO #112.

Subject to and without waiving the foregoing, Defendants have produced Mr. Connor's Reliance Materials and will produce any additional Reliance Materials in accordance with CMO #112.

Dated: June 24, 2014.

Respectfully submitted,

by permission

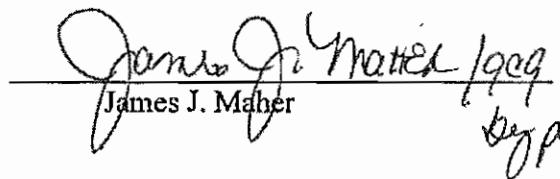
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Facsimile: (415) 318-1300

**Attorneys for Defendants Chevron
Corporation, Chevron U.S.A. Inc.,
Chevron Puerto Rico, LLC, Chevron
Estrella Puerto Rico Inc., Chevron
Caribbean Inc. and Chevron
International Oil Company, Inc.**

Certificate of Service

I hereby certify that I have this 24th day of June, 2014, served by Lexis/Nexis File & Serve, a copy of the foregoing pleading on all parties of record.

by permission

James J. Maher